SP ENERGY NETWORKS

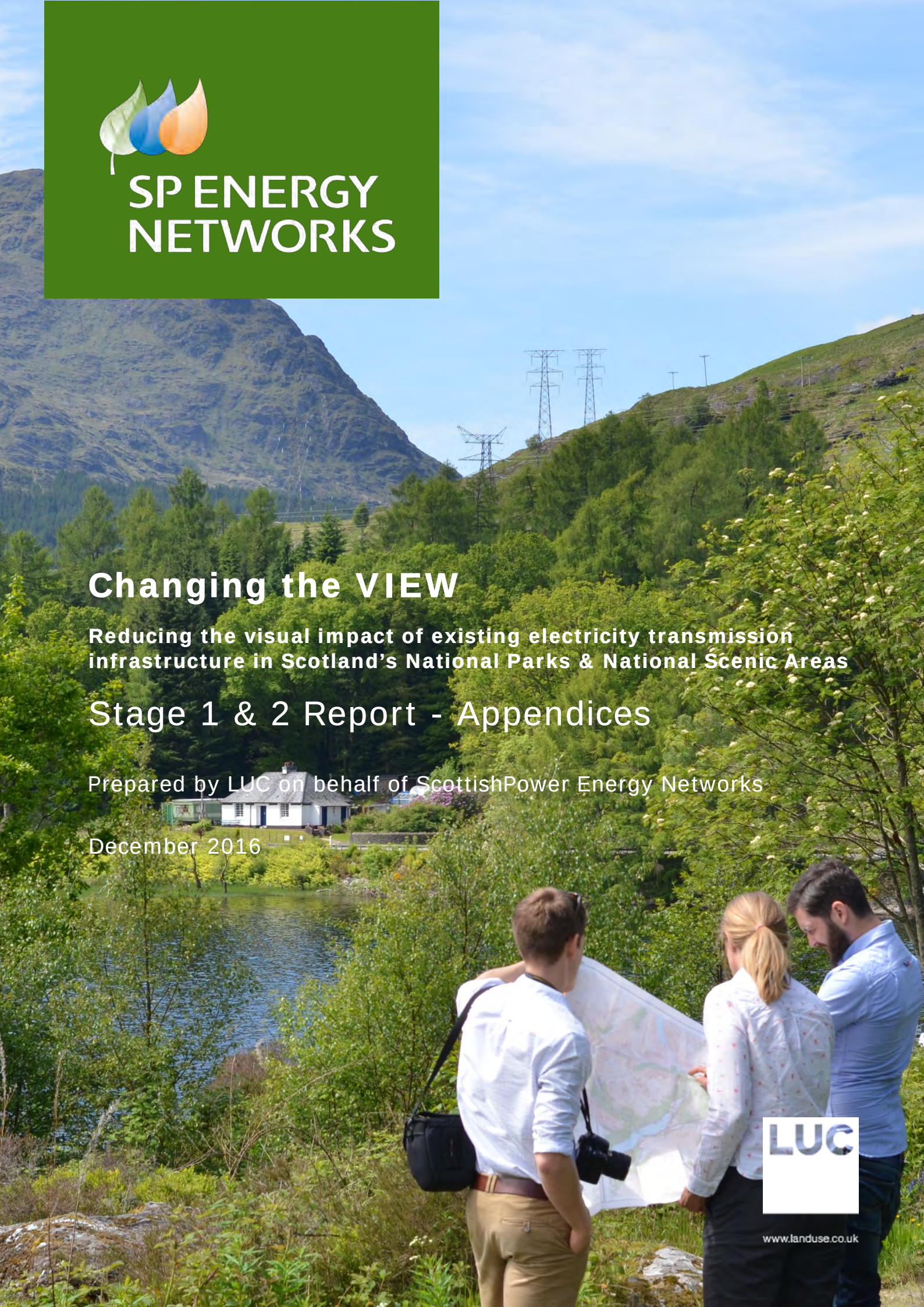
Changing the VIEW

Reducing the visual impact of existing electricity transmission infrastructure in Scotland's National Parks & National Scenic Areas

Stage 1 & 2 Report - Appendices

Prepared by LUC on behalf of ScottishPower Energy Networks

December 2016



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Reducing the visual impact of existing electricity transmission infrastructure in Scotland's National Parks & National Scenic Areas

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Appendix 1
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Detailed LVIA Methodology

Assessment of Impacts on the Landscape

Following the methods set out in GLVIA3[1], the value and susceptibility of the landscape was determined, based on the application of agreed criteria. The size/scale and geographic extent of the impact on the landscape was also determined. A judgement of the relative importance of the impact was then made based on these assessments.

Sensitivity of the Landscape Receptor

In accordance with GLVIA3, the **sensitivity** (nature of the landscape receptor) is considered with reference to individual judgements of both susceptibility and value, based on the criteria provided below.

Susceptibility of the Landscape Receptor

The **susceptibility** of a landscape receptor is defined in GLVIA3 as:

'*the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation*.' (GLVIA3, Page 88, Paragraph 5.40)

The project analyses the impact of transmission infrastructure which is already present, rather than a 'proposed development'. For the purposes of this project, the evaluation of susceptibility focuses on how well the landscape accommodates the existing transmission infrastructure.

Appendix Table 1 sets out the criteria which will be applied to the landscape around each assessment section, up to 5km from the line, to arrive at a judgement on its susceptibility to the transmission line.

Appendix Table 1 includes a note as to which of the criteria are relevant to consideration of the Holford Rules[2] and Horlock Rules[3], which form the principal guidance on routeing transmission lines and siting and substation infrastructure. The last criterion includes consideration of wildness and wild land, including the Wild Land Areas as identified in SPP[4], and the contribution they make to the landscape character in each relevant location along the route of the transmission lines.

[1] *Guidelines to Landscape and Visual Impact Assessment – Third Edition (GLVIA3).* (2013) Landscape Institute & Institute for Environmental Management and Assessment.

[2] Holford Rules, (1959) Lord Holford, with subsequent updates NGC 1992, SHETL 2003

[3] Horlock Rules, (2003). NGC with subsequent update 2006

[4] Scottish Government, (2014), 'Scottish Planning Policy', Available [online] at: http://www.scotland.gov.uk/Resource/0045/00453827.pdf

Appendix Table 1: Criteria for judging susceptibility of landscape receptors

Criterion	Definition		
	Lower susceptibility	⇔	**Higher susceptibility**
Landform (Holford Rules 4 and 5) (Horlock Rule 4)	Landforms that are smooth, regular and convex, or flat and uniform, are likely to be less susceptible to transmission infrastructure than a dramatic or rugged landform with strong topographical variety. This is because the latter are more prominent and distinctive in character. Broad valleys and low rolling hills have greater potential to provide back clothing and enclosure, limiting the perceptibility of transmission infrastructure.		
	The transmission infrastructure is accommodated within the landform	⇔	The transmission infrastructure conflicts with prominent or distinctive landforms
Land cover (Holford Rules 5 and 6) (Horlock Rules 6 and 8)	Simple, uncluttered landscapes with sweeping lines and extensive areas of consistent ground cover are likely to be less susceptible to transmission infrastructure than areas with more complex, irregular or intimate landscape patterns (for example, historic field systems), where pylons will be more prominent. Trees, woodlands and hedgerows, although adding to complexity, may help to screen views.		
	The transmission infrastructure is accommodated within the land cover	⇔	The transmission infrastructure interrupts distinctive land cover patterns
Size / scale	A large size/scale landscape, where tall pylons and other transmission infrastructure may appear more in proportion, is likely to be of lower susceptibility than a small size/scale landscape, where the pylons are likely to be more dominant. Size/scale may relate to landform, e.g. an extensive plateau, or land cover, e.g. Size/scale of field boundary patterns. Comparison of pylons with 'human- scale' landscape features such as individual trees and buildings may also emphasise the size of the pylons.		
	The transmission infrastructure is accommodated within the scale of the landscape	⇔	The transmission infrastructure appears out of scale within the landscape
Skylines (Holford Rule 4)	Landscapes that do not form a distinctive skyline or backdrop are typically less susceptible to transmission infrastructure than those in which open, uninterrupted skylines are a distinctive feature. Pylons may be prominent on such skylines, and may interrupt the relationship between settlements and their landscape settings.		
	The transmission infrastructure does not affect skylines or settings	⇔	The transmission infrastructure affects prominent skyline(s) and/or interrupt important settings
Prominent landscape features	Landscapes with strong visual features and focal points, such as distinctive landforms or man-made landmarks such as hilltop monuments or church spires, will be more susceptible to transmission infrastructure than landscapes which have fewer visual foci. Pylons may detract from or conflict with these prominent landscape features.		

Criterion	Definition		
	Lower susceptibility	⇔	**Higher susceptibility**
	The transmission infrastructure does not conflict with prominent features of this landscape	⇔	The transmission infrastructure overwhelms the prominent features of this landscape
Human influence	The amount of human influence on the landscape (including nature of settlement and land use) may influence its susceptibility to transmission infrastructure. Pylons and/or associated infrastructure are likely to be less intrusive in landscapes that are characterised by overt man-made structures or land use and/or by the presence of road or rail infrastructure. Commercial forestry may be seen as a more recent land use in upland landscapes that would otherwise seem more natural. The presence of transmission infrastructure may be in conflict with more traditional settled and farmed landscapes and erode their rural character.		
	The landscape includes overt man-made structures or land use and the transmission infrastructure is relatively unobtrusive	⇔	The landscape does not include overt and the transmission infrastructure forms a substantial intrusion
Vertical infrastructure	Landscapes which are already affected by vertical built structures such as communications masts, other pylons, wind turbines, prominent chimneys, etc., may be less susceptible to the impacts of transmission infrastructure, and specifically pylons. However, where these vertical structures are seen in close proximity to each other and to the pylons, there may be visual clutter. Other visual conflicts, resulting from the creation of a 'wirescape', may also result where multiple transmission lines converge.		
	The transmission infrastructure is seen in the context of other vertical infrastructure, but without visual clutter or visual conflicts	⇔	The transmission infrastructure is the only vertical infrastructure in this landscape or creates visual conflicts
Perceptual aspects and wildness (Holford Rules 1 and 2) (Horlock Rule 2)	Landscapes that provide opportunities to experience a sense of relative wildness and/or remoteness, including a lack of overt man-made structures, freedom from visual and audible factors such as openness, and perceived naturalness may be more susceptible to transmission infrastructure than landscapes that lack these qualities.		
	The transmission infrastructure does not alter the perception of this landscape, and does not erode its wildness character	⇔	The transmission line introduces man-made structures into a landscape which is otherwise remote, and wild and may be a defined Wild Land Area (WLA), substantially eroding these perceptions

Value of the Landscape Receptor

The **value** of a landscape is recognised as being a key contributing factor to the sensitivity of landscape receptors. The project focuses nationally designated landscapes, which are of recognised national value. However, the local landscape value may vary across the designated areas. The relative value of the landscape in which the transmission line or associated transmission infrastructure is located was determined through the application of the criteria set out in **Appendix Table 2**.

Appendix Table 2: Criteria for judging value of landscape receptors

Criterion	Definition		
	Lower value	⇔	**Higher value**
Special qualities	The extent to which the particular special qualities of the designated area are expressed in the landscape under consideration		
	The special qualities of the designated area are not clearly expressed in the area under consideration.	⇔	The special qualities of the designated area are clearly expressed in the area under consideration
Landscape quality	Intactness of the landscape is demonstrated by, among other things: presence of characteristic natural and man-made elements, which are generally in good condition; and absence of significant incongruous or detractive elements.		
	The area of landscape under consideration has relatively low landscape quality.	⇔	The area of landscape under consideration has relatively high landscape quality.
Scenic quality	General appeal of the landscape to the senses through, for example, combinations of some of the following: distinctive, dramatic or striking landform or patterns of land cover; strong aesthetic qualities which appeal to the senses, such as size/scale, form, colour and texture; or visual diversity which contributes to the appreciation of the landscape.		
	The area of landscape under consideration has relatively low scenic quality	⇔	The area of landscape under consideration has relatively high scenic quality
Conservation interests	The presence of nationally designated historic landscape assets (Inventory-listed Gardens and Designed Landscapes; Inventory-listed battlefields; and Scheduled Monuments) and/or the presence of internationally or nationally designated natural heritage assets (Ramsar sites; SACs; SPAs; SSSIs; and National Nature Reserves) or ancient woodland.		
	The area of landscape under consideration has few conservation interests	⇔	The area of landscape under consideration has a high density of conservation interests
Recreational value	The extent to which experience of the landscape makes an important contribution to recreational use and enjoyment of an area. Indicated by the presence of Country Parks, visitor facilities such as car parks, and density of the local footpath network.		
	The area of landscape under consideration has low recreational value	⇔	The area of landscape under consideration has relatively high recreational value

Magnitude of Landscape Impact

The consideration of magnitude of landscape impact (nature of landscape impact) is based on judgements on the **scale of the impact** and its **geographical extent**. As the study considers the impacts of transmission infrastructure already present in the landscape, the assessment does not assess the criteria of duration and reversibility of the landscape impacts as it would for proposed development. Further information on each criterion is provided below.

Scale of the Impact on the Landscape

The **scale of the impact** reflects the degree to which the transmission infrastructure changes the character of the landscape, and how it affects key characteristics. Judgements of the size/scale of the impact were made in accordance with **Appendix Table 3**.

Appendix Table 3: Criteria for judging size/scale of the impact on the landscape

Smaller scale	⇔	Larger scale
The transmission infrastructure does not alter perception of the landscape, or is accommodated satisfactorily within the landscape context (i.e. fits into the landscape). The transmission infrastructure has no impact on key characteristics.	⇔	The transmission infrastructure has a strong influence on perception of the landscape, and conflicts with, or overrides, key characteristics.

Geographical Extent of the Impact on the Landscape

The **geographical extent** over which the transmission infrastructure affects the landscape was determined by the length of the route under consideration, and by the extent of the area over which its presence was apparent. The latter was indicated by the ZTV and was subject to further verification and consideration in the field. The geographical extent of the impact was judged in accordance with **Appendix Table 4**.

Appendix Table 4: Criteria for judging geographical extent of the impact on the landscape

Smaller geographical extent	⇔	Larger geographical extent
The transmission infrastructure is perceived only locally, with limited impact on wider landscape character.	⇔	The transmission infrastructure has a widespread influence on perception of the landscape, and its presence is perceived across a wide area.

Assessing the Importance of the Impact on the Landscape

The assessments of **susceptibility**, **value**, **scale of the impact** and **geographical extent** were considered together to provide an overall profile of the impact on the landscape. An informed professional judgement of this overall profile, drawing on guidance provided in GLVIA3, was made to determine the importance of the impact.

In assessing the overall profile of the landscape impact across the assessment section, note is made of any locations (which may be only one or two towers) where the transmission infrastructure has a particularly important impact on the landscape, even though the impact of the remainder of the transmission infrastructure in that particular section may be considered of lesser importance.

A formal process was not applied, for example the use of a matrix. Appropriate weight was given according to the aspects which are considered to be making the greatest contribution to the overall impact. **Appendix Table 5** provides guidance on how the overall judgements of the relative importance of each impact were made.

Appendix Table 5: Criteria for judging importance of the impact on the landscape

Lesser importance	⇔	Greater importance
The transmission infrastructure is accommodated within the landscape, and does not conflict with key characteristics. It does not substantially undermine the valued characteristics of the landscape. The impact is small in size/scale, and limited in its geographical extent.	⇔	The transmission infrastructure conflicts with the character of the landscape, forming an intrusive feature which substantially erodes the valued characteristics. The impact is large in size/scale, and widespread in its geographical extent.

The importance of the landscape impact was assessed as **low**, **moderate**, **high** or **very high** for each section. This assessment is a key input into the overall consideration of the relative impacts of different sections, and the prioritisation of potential mitigation options. The reasoning behind the assessment judgements is fully documented and explained in this report.

Assessment of Impacts on Visual Amenity

The assessment of impacts on visual amenity was undertaken using a selection of representative viewpoints. Each representative viewpoint was chosen to represent the experience of one or more of the receptor groups listed above. At each location a judgement of the value of the view and the scale of the impact on the receptors was made. With reference to the geographical extent and frequency of the viewpoints and impacts, an overall evaluation of the impacts of the line on views was made.

Sensitivity of the Visual Receptor

The **sensitivity** of visual receptors (nature of visual receptors) may involve a complex relationship between the susceptibility to change of the receptors (people) and the value attached to a view. Therefore the rationale for considering sensitivity is set out for each receptor in relation to both susceptibility and value, as set out below.

Susceptibility of the Visual Receptor

Visual receptors were identified on the assumption that they are of high **susceptibility** to change on the basis that, as visitors to and users of the designated areas, will be engaged with the landscape. Susceptibility is not therefore assessed separately.

Value of the View

Recognition of the **value** of a view is determined with reference to:

- Views which are recorded as important in relation to special qualities of the National Park or NSAs, or which are identified in specific studies of views;
- Recorded as important in relation to heritage assets (such as designed views recorded in citations of Gardens and Designed Landscapes);
- Appearances in guide books or on tourist maps, or provision of facilities for their enjoyment such as parking and interpretation;
- The relative numbers of people at the viewpoint; and
- Judgements about the relative quality of the view.

Judgements on the value of views were guided by **Appendix Table 6**.

Appendix Table 6: Criteria for judging value of the view from each viewpoint

Lower value	⇔	Higher value
Views which are not formally recognised or promoted, or are not associated with designated historic landscape assets or visitor facilities, but which are likely to be valued at a local community level	⇔	Views which are of recognised importance, including: • Designated views or scenic routes, advertised with road signs or highlighted on OS maps and/or in tourist information • Views recognised or protected in relation to the special qualities of the area, or nationally designated historic landscape assets

Magnitude of Visual Impact

The consideration of magnitude of visual impact (nature of visual impact) is based on judgements on the **scale of the impact**, its **geographical extent** and its **frequency**. As the study considers the impacts of transmission infrastructure already present in the landscape, the assessment does not assess the criteria of duration and reversibility of the visual impacts as it would for proposed development. Further information on each criterion is provided below.

Scale of the Impact on the View

Judging the **scale of the impact** on the view takes account of:

- The presence of the transmission infrastructure in the view, including the proportion of the view which it occupies, its proximity to the viewer, and whether views are full, partial or glimpsed;
- The number of pylons visible and whether they are seen side-on, 'stacked' against one and other, skylined or back-clothed; and
- The degree of contrast, or integration, between the transmission line and the wider visual context, in terms of form, size/scale and mass, line, height, colour and texture.

The size/scale of the impact is judged in accordance with **Appendix Table 7**.

Appendix Table 7: Criteria for judging size/scale of the impact at the viewpoint

Smaller size/scale	⇔	Larger size/scale
The transmission infrastructure is not a prominent feature within the view, or is reasonably well absorbed by the visual context. The transmission infrastructure may be relatively distant or seen at an oblique angle.	⇔	The transmission infrastructure is in close proximity to the viewer, in a direct line of vision, or affecting a substantial part of the view. The transmission infrastructure is prominent within, or contrasts with, the visual context, and detracts from its visual amenity.

Geographical Extent of the Impact on Visual Receptors

The **geographical extent** over which the transmission line affects visual receptors was determined by the extent of transmission infrastructure under consideration, and by the extent of the area over which visual impacts on receptors was experienced. The latter was informed by the ZTV and was subject to further verification and consideration in the field in relation to specific receptor groups. The geographical extent of the visual impact was judged in accordance with **Appendix Table 8**.

Appendix Table 8: Criteria for judging geographical extent of the visual impact

Smaller geographical extent	⇔	Larger geographical extent
The transmission infrastructure is perceived only locally, potentially only one or two locations or by a relatively small number of visual receptors.	⇔	The transmission infrastructure is perceived over an extensive area, potentially in continuous views from a route, or by a large number of visual receptors.

Frequency of the Impact

Impacts which are found to occur at specific viewpoints may be representative of impacts on similar views from other locations, or they may only be experienced from one location. It was necessary to note this information in the field, and this was done under the heading of **frequency**. For example, a viewpoint on a documented route or path may be representative of similar views which are available over a long stretch of the route.

Assessing the Importance of the Impact on Visual Amenity

For each assessment section, an overall assessment was made of the importance of the visual impact of the transmission infrastructure. The assessment of **susceptibility**, **value**, scale of the impact, geographical extent and frequency were considered together to provide an overall profile of the impact on visual amenity. The overall assessment was derived through informed professional judgement, generalising from the individual viewpoint assessments and drawing on guidance in GLVIA3.

In assessing the overall profile of the impact on receptor groups across the assessment section, a mapped record was made of any locations (which may be only one or two towers) where the transmission infrastructure may have a particularly important impact on visual amenity, even though the impact of the remainder of the transmission infrastructure in that particular section may be considered of lesser importance.

A formal process was not applied, for example the use of a matrix. Appropriate weight was given according to the aspects which were considered to be making the greatest contribution to the overall impact. **Appendix Table 9** provides guidance on judging the relative importance of each impact.

Appendix Table 9: Criteria for judging importance of the impact at the viewpoint

Lesser importance	⇔	Greater importance
The transmission infrastructure is accommodated within the view and/ or is a small feature within a view which does not have recognised value.	⇔	The transmission infrastructure is prominent or contrasting within the view, and/ or is a large feature within a view which is promoted or advertised.

The overall assessment was recorded on a scale of **low**, **moderate**, **high** or **very high**. This assessment was a key input into the overall consideration of the relative impacts of different sections and the prioritisation of potential mitigation options. The reasoning behind the assessment judgements is fully documented and explained in this report.

Appendix 2
Detailed LVIA Survey Sheets

YW.1 - Gleann nan Caorann

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.1	Infrastructure	L8 275kV Steel lattice towers
Length of section	7 km	Survey team	LW/AB	Survey date	06/10/2015

Landscape and visual context

This section of line runs between Troisgeach Bheag, a rugged summit above Inverarnan (at the northern end of Loch Lomond), north west along the upper sides of Gleann nan Caorann to the edge of the LLTNP boundary south of the Munro Ben Lui (1130 m AOD). The line passes along the upper sides of the glen in a relatively straight line, crossing heather moorland and semi-natural grassland, and also semi-natural woodland at the south-eastern end of the section. The area is remote, and accessible only via farm / transmission line access tracks. Sheep and cattle graze the slopes.

The transmission line continues north-westwards out of the National Park through coniferous forestry plantations east of Dalmally before contouring around the northern shores of Loch Awe to Cruachan Hydro power station beneath the slopes of Ben Cruachan at the eastern end of the Pass of Brander.

Baseline Landscape character type(s) and key characteristics

This section of transmission line is located entirely within the **Highland Summits LCT**, the key characteristics of which are as follows:

- *Complex geology, with intensely craggy hills cut by narrow glens;*
- *Strong pattern of exposed rock, crags, small lochs and a myriad of water courses;*
- *Simple land cover of semi natural grassland with patchy heather, and bracken and bog on lower slopes;*
- *Impounded lochs, coniferous forestry, hydro-electric infrastructure and transmission lines close to the mountains north west of Loch Lomond;*
- *Fragments of oak and birch trace burns and gullies;*
- *No settlement;*
- *Sense of wildness, falls within the Ben Lui Wild Land Area.*

Special qualities of the designated area

Special qualities of **Loch Lomond North** that are evident within the landscape that surrounds this section are:

- *Vast and open sense of place and long dramatic vistas;*
- *Huge craggy slopes enclosing highland glens;*
- *Largely undeveloped, although pylons and tracks are present;*
- *Numerous groups of shielings along burns.*

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	H	L	L	H	L	H	H

Value						
	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation	
L/M/H/VH	M	H	H	VH	M	

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility		M			The landscape is large scale, with dramatic rugged hills and a simple landcover. The pylons are generally accommodated within the scale of the landscape and are mainly set against the moorland slopes, although some skylining occurs where they are situated on higher ground against the distinctive rugged hill profile. There are few other landmarks or vertical features in this section. The area is unsettled and relatively inaccessible, but does contain man-made elements which detract from the sense of wilderness.
Value			H		The area expresses the dramatic craggy hills and vast landscape scale typical of the Highland Summits LCT. Communications and hydro-electric infrastructure and associated access tracks detract from the sense of wildness experienced elsewhere in the LLTNP. The landscape is relatively intact, with semi-natural grassland, heather moorland and some woodland. Much of the area is within the wider Glen Etive and Glen Fyne SPA. There is semi-natural and ancient woodland in the lower glen (Dubh Eas) which is also a SSSI / SAC. The north western end of the section is within the wider Ben Lui SAC. The area is relatively inaccessible except to walkers. Ben Lui is more commonly accessed from the A85.
Scale of the impact on the landscape			H		In terms of scale, the pylons are generally well accommodated within the vast landscape, although they detract from the sense of wildness and remoteness which would otherwise be experienced. Where sited on higher ground, the pylons can conflict with the rugged mountain backdrop.
Geographical extent of the impact on the landscape		M			The influence of this section of the line is perceived locally, within Gleann nan Caorann, although some intervisibility with high mountain peaks does occur.
Importance of the impact on the landscape			**H**		**The line is generally accommodated within this large scale landscape, particularly where the pylons are sited on lower slopes and backclothed by moorland. The geographic extent is relatively contained within the glen. However, the line detracts from the overall sense of remoteness and wilderness that the area has, despite other man made influences (e.g. tracks, hydro-electric infrastructure and forestry).**

Summary description of landscape impacts	
This section of the line is generally well accommodated due to the large scale nature of the landscape and simple land cover of moorland. In the vicinity of Troisgeach Bheag the pylons are on more elevated ground and are incongruous with the skyline formed by rocky hill slopes. However, the pylons detract from the overall sense of wilderness and remoteness within the glen, and the surrounding WLA, although it is noted that other man-made elements are present in the glen e.g. tracks, hydro-electric infrastructure and some forestry.	
Overall assessment of landscape impact (L/M/H/VH)	**High**

(See visual assessment on next page)

Key Issues
• The pylons in the vicinity of Troisgeach Bheag are likely to be visible on the skyline to receptors in the vicinity of Inverarnan / Glen Falloch. • The presence of infrastructure within the Ben Lui WLA is in juxtaposition with the perceptual qualities expected of this type of remote and rugged landscape, and is key detraction to receptors visiting this landscape. • Existing land management processes within this valley may be a key consideration of any mitigation proposals which are potentially developed and implemented in this landscape, which has seen extensive sheep grazing creating an often barren and bleak landcover pattern.
Potential mitigation opportunities
• Relocation of pylons in the vicinity of Troisgeach Bheag to lower slopes; • Reduce visual impact of access tracks alongside the pylons e.g. from Ben Lui; • Extension of planting of native trees (landscape enhancement/green infrastructure) along the corridor of the transmission line and parallel access track to the southern footslopes of Ben Lui; • Undergrounding of overhead line through Gleann Caorann removing visible infrastructure from WLA.

YW.1 – Gleann nan Caorann

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Hill Walkers	230989, 719940	Close to distant views of the line running along the upper sides of Gleann nan Caorann and onto moorland between Meall nan Gabhar (743 m AOD) and Beinn a'Chleibh (916 m AOD).	Inaccessible except to hill walkers. Unlikely to be used to access Ben Lui	L	Approximately 90° view of up to 25 pylons running in a straight line across the upper glen slopes and moorland hills. Mainly backclothed except those in proximity and those on the distant skyline.	H	Track runs parallel to the line for approximately 5 km, similar views likely.	M
2	Hill Walkers	226545, 726405	Ben Lui (1130 m AOD) Panoramic views from the summit, including south-east towards the northern end of Loch Lomond, and south along Gleann nan Caorann.	Munro hill summit within the LLTNP	H	The line is visible between Troisgeach Bheag and the edge of the LLTNP where it becomes screened by the ridgeline to Beinn a'Chleibh (916 m AOD). The pylons are backclothed by moorland at a distance of approximately 2.8 km at their closest point.	L	Similar views from nearby peaks, ridges and elevated slopes are likely	M
3	Hill Walkers	225000, 725600,	Beinn a'Chleibh (916m AOD) Panoramic views from the summit, including westwards out of the LLTNP towards Dalmally.	Munro hill summit on the boundary of the LLTNP	H	The line is visible from the hill summit, and the linear wayleave is perceptible as the line leaves the LLTNP to the west.	L	Similar views from nearby peaks, ridges and elevated slopes are likely	M

Visual impacts from transient routes

A number of informal paths are located within Gleann nan Caorann, used by recreational walkers accessing the remoter areas of the Ben LUI WLA area. The Munro summits of Ben Lui, Beinn a'Chleibh, Ben Oss and Beinn Dubhchraig are most frequently accessed via hill paths from the north. Visibility of this section of line is limited from the A82 to the east.

Summary description of visual impacts

This section of line is visible in close proximity views from the track which runs alongside in parallel for most of its length, where it has a high visual impact resulting from proximity and numbers of pylons visible, however few walkers are believed to use this route in comparison to other well frequented hill paths to the surrounding summits. There is also visibility from nearby summits including Ben Lui, a Munro, where the pylons are seen predominantly against a moorland backcloth, decreasing in perceptibility at ever increasing distances.

Overall assessment of visual impact (L/M/H/VH)	**Moderate**

YW.2 – Inverarnan

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.2	Infrastructure	L8 275kV Steel lattice towers
Length of section	3.5 km	Survey team	LW/AB	Survey date	21/09/2015

Landscape and visual context

The 275kV transmission line crosses the southern end of Glen Falloch, a dramatic, steep sided upland glen between elevated summits, with waterfalls cascading to the glen floor. The line falls from approximately 380 m AOD on the eastern side of the glen, to 10m AOD in the glen floor, and rises again to approximately 250 m AOD on the western side of the glen at Troisgeach Bheag. The line crosses rugged rocky slopes and moorland on the glen sides, and pasture, broadleaved woodland, the River Falloch and A82 trunk route on the lower glen sides and glen floor. Other infrastructure including the SHE Transmission line and telegraph wood poles cross the glen.

Baseline Landscape character type(s) and key characteristics

The lower glen sides and floor are part of the **Upland Glens LCT**, the key characteristics of which are as follows:

- *A narrow, steep sided glen, enclosed by rugged hill slopes;*
- *Patterned with rocky outcrops, boulders and screes, but extensively wooded on lower slopes, including ancient and semi-natural woodlands of oak and birch;*
- *Strategic communications route (A82); and*
- *Steep and dark rocky and wooded slopes confine views.*

The upper glen sides are part of the extensive **Highland Summits LCT**, the key characteristics of which are as follows:

- *Intensely craggy hills with steep slopes and rocky ridges;*
- *Narrow glens cut deeply, often containing fast flowing rivers and waterfalls;*
- *Simple land cover of semi-natural grassland and patchy heather with some coniferous forestry on lower slopes; and*
- *Massive peaks and ridges highly visible, providing a scenic rugged backdrop to the glen.*
- *The upper glen sides fall within the Ben Lui Wild Land Area (western side) and the Ben More – Ben Ledi Wild Land Areas (eastern side).*

Special qualities of the designated area

Special qualities of **Loch Lomond North** that are evident within the landscape that surrounds this section are:

- *Highland glen character with narrow and uneven sides and huge craggy slopes;*
- *Upland hills provide a dramatic backdrop;*
- *Semi-natural and ancient woodland on lower glen sides and glen floor.*

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	H	M	L	H	M	M	M

Value						
	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation	
L/M/H/VH	M	H	M	H	M	

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility		M			Dramatic and rugged landform with a complex landcover of rocky slopes, woodland and a flat pastoral glen floor. Trees provide some screening. Pylons are accommodated within the lower glen and glen floor, but on upper slopes and ridgelines they affect the rugged skyline and dominate landmark hills, detracting from the overall sense of wildness. There are some conflicts with the SSE line.
Value		M			The glen is not typical of Loch Lomond North (as the loch has little influence) but contrasts between the flat glen floor and rugged slopes create an attractive setting. There is extensive semi-natural and ancient woodland on the lower glen sides. The area provides some opportunities for walking, camping and scenic drives.
Scale of the impact on the landscape			H		The line conflicts with the key characteristics of the glen, particularly on the upper slopes and containing ridges.
Geographical extent of the impact on the landscape	L				The glen provides visual containment of the line in this section.
Importance of the impact on the landscape		**M**			**Overall, the line is better accommodated on the lower glen sides and floor where it is backclothed by woodland and in keeping with other human scale landscape elements, although some visual conflicts with other lines occur. On the upper slopes and rocky ridges the pylons appear to dominate the scale of the upland hills, and detract from the overall sense of wildness.**

Summary description of landscape impacts	
The line crosses the dramatic lower end of Glen Falloch, north of Loch Lomond. The scale of the pylons is generally accommodated within the large scale glen, particularly those on the settled glen floor which contains small settlements and the A82 road corridor along the River Falloch. When ascending the eastern slopes of the glen and crossing the dramatic rocky ridges containing t the pylons are more visible and incongruous with the wild and remote qualities that extend into the mountainous upland areas, away from the settled glens.	
Overall assessment of landscape impact (L/M/H/VH)	**Moderate**

(See visual assessment on next page)

Key Issues

- Transmission towers located on the rocky ridges above the glen east of the Great Glen Way are prominent when observed from within the surrounding landscapes, both within the valley (e.g. from the A82) and from the elevated slopes and summits.
- The presence of transmission infrastructure within both the Ben Lui WLA and Ben More – Ben Ledi WLA is seen to be at odds with the perceptual qualities of these landscapes.

Potential mitigation opportunities

- Re-routeing of transmission line or relocation of pylons positioned on the elevated ridges;
- Undergrounding of transmission line to remove most prominent section of line/towers;
- Potential alternative/bespoke transmission tower design for towers in prominent or highly visible locations;
- Enhancement of woodland planting/restoration to provide further screening from key viewpoints and transient routes along the glen e.g. the West Highland Way, railway line and A82.

YW.2 – Inverarnan

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Road users on the A82	231500, 717084	Medium distance views to the line crossing into the steep sided glen from the higher plateau. West Highland Way runs parallel to the east of the A82.	Main route through the LLTNP.	M	Glimpsed views of up to 4 pylons through roadside vegetation, backclothed and skylined. Scale accommodated within the landscape, although pylons on the ridge are more visible. Wirescape notable from this viewpoint (SSE line visible).	M	Visible from a short section of the A82, travelling north.	M
2	Beinglas Campsite (visitors, walkers on West Highland Way)	231950, 718778	Medium distance views of the line crossing down into the wooded glen from the rocky ridge above.	Represents views from the West Highland Way.	H	Open views of 3 pylons on the skyline (the remainder being screened by woodland on the glen floor). Wirescape with the 132kV line notable. Views available in other directions.	M	Limited to the campsite area. Roadside views generally screened by vegetation in this section.	H
3	Farm / pylon access track	231390, 719532	Close to medium distance views of the line crossing the steep sided glen, including views to Inverarnan substation.	Few receptors likely to walk this track.	L	120° view of approx. 10 pylons crossing the glen, & the SSE substation at the upper end of Loch Lomond. Most of the pylons are backclothed, except those on the ridges which contain the glen.	M	Similar views from approximately 1 km of farm track.	L

Visual impacts from transient routes

Sequential visual impacts experienced from the Great Glen Way long distance footpath on the east of the glen, the railway on the west of the glen, and from the A82 which follows the foot of the glen will generally be limited to fleeting views of the transmission line where it crosses these routes. Perpendicular views along the transmission line are available when passing beneath the line from these routes, where the wayleave through neighbouring woodland exacerbates the presence of the transmission line and towers.

Summary description of visual impacts

This section of line is better accommodated in the settled glen floor, where it is in scale with other elements such as trees and farmsteads, although some visual conflicts occur, particularly with the 132 kV line. On the rugged ridges above the glen the pylons diminish the scale of the hills and detract from the scenic backdrop to the glen.

Overall assessment of visual impact (L/M/H/VH)	**Moderate**

YW.3 – Glen Gyle

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.3	Infrastructure	L8 275kV Steel lattice towers
Length of section	4.9 km	Survey team	LW/AB	Survey date	21/09/2015

Landscape and visual context

This section of line runs in a north-west to south-east direction through the upland glen of Glen Gyle, a dramatic, steep sided glen enclosed by the rugged peaks of Meall Mor, Beinn a Choin and Beinn Ducteach, located to the east of Loch Lomond. The subsection starts between the peaks of Ben Glas and Cruach, high above the eastern side of Glen Falloch and the village of Inverarnan at 390m AOD, the line then runs for 120m along an upland plateau of moorland before heading down Glen Gyle, running in parallel with the Glengyle Water. This section finishes within the lower part of the glen leading into YW.4 at approximately 160m AOD. The upper part of the glen is relatively remote and accessible only via maintenance track, which is also a core path. Sheep extensively graze the slopes.

Baseline Landscape character type(s) and key characteristics

This section is within the extensive **Highland Summits LCT**, the key characteristics of which are as follows:

- *Massive peaks and ridges highly visible, providing a scenic rugged backdrop to the glen.*
- *Complex geology, with intensely craggy hills cut by narrow glens;*
- *Strong pattern of exposed rock, crags, narrow glens cut deeply, often containing fast flowing rivers and waterfalls;*
- *Simple land cover of semi natural grassland with patchy heather, and bracken and bog on lower slopes;*
- *No settlement;*
- *Sense of remote wildness*
- *Intensely craggy hills with steep slopes and rocky ridges;*

This section of line is also located entirely within the **Ben More – Ben Ledi Wild Land Area**.

Special qualities of the designated area

Special Qualities of **Strath Gartney, Achray and Loch Ard Forests** area of the Trossachs that are evident within the landscape that surrounds this section are:

- *Combination of lochs, woodland and craggy slopes and summits gives a strong sense of place;*
- *An example of the Highlands in miniature;*
- *Diverse mixed forest landscape ;*
- *Valued landscape qualities of a sense of remoteness and tranquillity;*
- *Small settlements focused on the loch shores.*

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	VH	H	M	H	H	VH	H

Value					
	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation
L/M/H/VH	H	H	H	M	M

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility			H		The landscape is large in scale, with dramatic rugged hills with strong topographical variety and a relatively simple landcover. The pylons are generally accommodated within the scale of the landscape and are mainly set against the rocky slopes of the glen, although some skylining occurs in the upper part of the glen where the pylons are seen against the distinctive hill profile. The rugged peak of Beinn Ducteach forms a prominent landscape feature and main visual focal point looking into the glen, to which the pylons detract from. The area is unsettled and relatively inaccessible, containing little human influence and no vertical infrastructure, apart from the pylon line. The area in the upper part of the glen has a strong perceptual aspect of wildness and remoteness.
Value			H		The area expresses the number of the general special qualities of The Trossachs area and the dramatic craggy hills and large landscape scale are typical of the Highland Summits LCT. The landscape is relatively intact, with semi-natural grassland, heather moorland and some natural woodland along water courses and the glen side. The dramatic rugged hills that enclose the glen afford a distinctive and striking backdrop providing a strong scenic quality. The area is relatively inaccessible except to walkers.
Scale of the impact on the landscape			H		In terms of scale, the pylons are generally well accommodated within the large scale landscape, although they substantially detract from the sense of wildness and remoteness which would otherwise be experienced. Where sited on higher ground in the upper part of the glen, the pylons conflict with the rugged and distinctive backdrop of the surrounding hills.
Geographical extent of the impact on the landscape		M			The influence of this section of the line is perceived locally, within Glen Gyle, although some intervisibility with high mountain peaks that surround does occur.
Importance of the impact on the landscape			**H**		**The line is generally accommodated within this large scale landscape, particularly where the pylons are sited on lower slopes and backclothed by the rugged hills that enclose the glen. The geographic extent is relatively contained within the glen. However, the line substantially detracts from the overall sense of remoteness and wilderness within the area and consequently has an adverse impact on the Ben More - Ben Ledi Wild Land Area.**

Summary description of landscape impacts	
In terms of scale, the pylons are generally well accommodated within this large scale landscape, particularly where the pylons are sited on lower slopes and backclothed by the rugged hills that enclose the glen. Although, where sited on higher ground in the upper part of the glen, the pylons conflict with the distinctive backdrop of the surrounding hills. These man-made structures substantially detract from the overall sense of remoteness and wilderness which would otherwise be experienced in the area. Consequently, the line has an adverse impact on the Ben More - Ben Ledi Wild Land Area. The geographic extent of this impact is relatively contained within the glen, although views from adjacent hill summits and ridges within the WLA are possible.	
Overall assessment of landscape impact (L/M/H/VH)	**High**

(See visual assessment on next page)

Key Issues
• Angle towers are notable in the lower reaches of Glen Gyle where the line runs parallel to Gyle Water avoiding wet ground and landscape features (rocky outcrops and woodland in the glen). • Presence of the transmission infrastructure within the WLA appears at odds with the perceptual qualities expected of this landscape, especially when seen in the upland context from the Munro summits and connecting ridges, and detract from the sense of remoteness and wildness. • Occasionally the transmission towers located on the ridge/watershed at the head of Glen Gyle are seen against the skyline, often in close proximity views and from areas of lower ground. When seen from higher ground, including the Munro summits to the north, the towers are seen backclothed and appear less perceptible.
Potential mitigation opportunities
• Replacement of transmission line with underground cable route through WLA; • Enhance native woodland planting/restoration in line with the proposals for the Great Trossachs Forest NNR, to provide further screening from key viewpoints in the lower extents of the glen, the Great Trossachs Path and other footpaths which pass close to the transmission line; and • Reduce visual impact of maintenance track (core path) which runs alongside the transmission line through the glen.

YW.3 – Glen Gyle

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Walkers and cyclists	237570, 713812	Close views of the line from the maintenance track, which also doubles as a core path in WLA.	Important view west along Glen Gyle from the top of Loch Katrine.	H	180° view of pylons, backclothed and skylined. An angle tower at the foot of the glen is prominent despite being backclothed.	H	Open views along the length of the track/core path.	H
2	Hill walkers	234830, 716905	Close views of the line from upland slopes on south-western flanks of Parlan Hill (666m AOD), located in WLA.	Panoramic views across watershed to west and east, transitional location on ridge.	M	Approx. 180° view of pylons appearing skylined to the south as the cross the ridge and descend into Glen Gyle. Views south-west along the transmission line into the glen.	H	Similar views available from nearby summits and slopes, remote location.	H
3	Hill walkers	236745, 717925	View from Munro summit of Beinn Chabhair (933m AOD) in WLA to the north of the transmission line, at a distance of approx. 2km.	Important and valued panoramic views from hill summit.	H	Longer distance views of line, located on lower ground, backclothed apart from where it	H	Similar views available from nearby Munro summits and approach ridges.	H

Visual impacts from transient routes

Several well used hill paths cross the WLA, many leading to the Munro summits to the north of the transmission line, including the closest summit of Beinn Chabhair (933m AOD), from where views of the line are often possible. The infrastructure is often the only man-made feature in views from these hill paths. The Great Trossachs Path, which follows the shoreline of Loch Katrine, passes close to the transmission line at the eastern extent of this section. Angle towers appear prominent in views experienced by walkers and cyclists using this trail, with long distance views of the line as it heads north-west along Glen Gyle possible from the trail when travelling clockwise around Loch Katrine.

A core path runs along Glen Gyle in close proximity to the transmission line, from which views of the line are a frequent feature, intermittently screened by craggy outcrops and woodland, but often the only visible man made feature in views from the glen.

Summary description of visual impacts

This section of line is visible in close proximity views from the track (also a core path), which runs alongside the overhead line for most of its length, and has a high visual impact resulting from the proximity of the line and the numbers of pylons visible as receptors travel sequentially in parallel to the line. There is also visibility from nearby hill summits including Ben Glas where the pylons will be visible mainly at a lower elevation against a moorland backcloth, apart from where they pass over the ridge at the head of Glen Gyle before descending westwards towards Inverarnan.

Overall assessment of visual impact (L/M/H/VH)	**High**

YW.4 – Loch Katrine

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.4	Infrastructure	L8 275kV Steel lattice towers
Length of section	8.4 km	Survey team	LW/AB	Survey date	21/09/2015

Landscape and visual context

This section of the 275kV line passes along the steep side slopes above the north western edge of Loch Katrine between Glen Gyle and the small settlement of Stronachlachar, where it runs parallel to the Great Trossachs Path which skirts the western edge of the loch. Semi-natural and ancient woodland fringes the shores of the loch. The line crosses high ground above Stronachlachar before heading south towards Loch Ard Forest, passing an aqueduct outlet waterfall and crossing the B829 where it climbs the slopes to the south, south-east of Loch Arklet.

Baseline Landscape character type(s) and key characteristics

This section is located within the **Straths and Glens with Lochs LCT**, the key characteristics of which are as follows:

- *Long, narrow loch enclosed by steep, rugged hill slopes;*
- *Small promontories and narrow beaches along the shoreline;*
- *Small rocky and wooded islands at the head of Loch Katrine;*
- *Dams and aqueducts present;*
- *Settlement at the heads of the lochs e.g. Stronachlachar;*
- *Grand houses and lodges on the loch shore;*
- *Remote and tranquil - north of Stronachlachar the line crosses into the Ben More – Ben Ledi Wild Land Area.*

Special qualities of the designated area

Special Qualities of **Strath Gartney, Achray and Loch Ard Forests** area of the Trossachs that are evident within the landscape that surrounds this section are:

- *Combination of lochs, woodland and craggy slopes and summits gives a strong sense of place;*
- *Small settlements focused on the loch shores;*
- *Important industrial heritage includes dams, sluice houses, outflows and aqueducts which are all part of the Glasgow Corporation Water Works (1856 – 1859);*
- *Combination of ancient, semi-natural riparian and traditionally managed woodland fringe the shores of the loch;*
- *Loch Katrine inspired Sir Walter Scott's poem 'The Lady of the Lake' and there is a steam ship named after Sir Walter Scott which leaves from the harbour at Stronachlachar.*

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	VH	H	M	H	H	VH	H

Value

	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation	
L/M/H/VH	H	VH	H	H	H	

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility			H		The pylons contrast with the rugged landform and distinctive land cover of loch, woodland and moorland in the vicinity of Loch Arklet and Stronachlachar, although trees provide some screening. The pylons dwarf the scale of houses along the loch shore, and detract from the scale of the rugged hills. North of Stronachlachar the pylons are better suited to the scale of the wide strath and larger hills. The pylons interrupt distinctive skylines and landmark hills. At the top of Loch Katrine the pylons lead into Glen Gyle, part of the Ben More and Ben Ledi Wild Land area, with their tall manmade structures detracting substantially from the sense of remoteness, a key characteristic of the Glen.
Value			H		Many of the Special Qualities of the area are exhibited around Loch Katrine. Some areas of deforestation are a landscape detractor. There are many opportunities for recreation, including the Great Trossachs Path which runs along the northern side of Loch Arklet, through Stronachlachar and around the north western and northern shores of Loch Katrine, and is also a Core Path. The steam ship is visitor attraction. The area is part of the wider Great Trossachs Forest NNR.
Scale of the impact on the landscape			H		The pylons detract from some of the key characteristics of the area, including the strong sense of place created by the combination of loch, woodland and rugged hills. The pylons also detract from the strong sense of wildness and remoteness which would otherwise be experienced within the lower part of Glen Gyle.
Geographical extent of the impact on the landscape		M			Impacts are relatively localised to the western end of Loch Katrine, head of Loch Arklet, the lower part of Glen Gyle and the small valley in between.
Importance of the impact on the landscape			**H**		**Landscape impacts are notable, because the area strongly exhibits some of the Special Qualities attributed to the Loch Katrine and Loch Arklet area, and the pylons diminish the scale of the hills, particularly around Stronachlachar. At the far western end of Loch Katrine and lower end of Glen Gyle the subsection leads into the Ben More - Ben Ledi Wild Land Area, the pylons detract from the strong sense of wildness and remoteness which would otherwise be experienced within this area. Impacts are relatively localised to the western end of the loch.**

Summary description of landscape impacts	
The pylons are notable elements in an otherwise naturalistic landscape of lochs fringed with woodland and backclothed by rugged hills. The impacts are relatively localised to the western end of Loch Katrine and head of Loch Arklet alongside the B829, where the pylons detract from the key characteristics and Special Qualities exhibited in this area. The pylons affect the setting of some features of industrial heritage such as the aqueduct outlet waterfall south of Stronachlachar, and landscape features such as the rugged low hills around Stronachlachar.	
Overall assessment of landscape impact (L/M/H/VH)	**High**

(See visual assessment on next page)

Key Issues
• Heavier angle towers are highly noticeable in prominent positions close to key receptors hot spots, even when backclothed against the underlying landscape. • A number of pylons located on ridges and craggy landform due to the complexity and steep slopes of the underlying landscape, as a result these towers appear prominent when viewed in close proximity, and are often seen against the skyline.

- The transmission line is located in close proximity to receptor hot spots around Loch Katrine and Stronachalar which forms a key recreational and tourist destination within the LLTNP.
- The transmission line interacts with network of smaller scale distribution infrastructure located on the western and southern side of Stronachlachar, potential opportunities to reduce wirescape impacts in these areas through mitigation of distribution infrastructure.

Potential mitigation opportunities

- Re-routeing of transmission line around the settlement of Stronachalar and the southern edge of Loch Katrine to avoid visual impacts on key visual receptors at Stronachalar Pier, recreational users and tourists, and residential receptors close to the transmission line;
- Replacement of a section of the overhead transmission line with an underground cable route to remove visual impacts;
- Replacement of existing steel lattice towers with an alternative pylon design with a reduced vertical height (e.g. L3 steel lattice tower / T-Pylon);
- Planting of native deciduous or coniferous trees close to transmission line corridor to reduce perceptibility of infrastructure from key locations;
- Introduction of a new installation which creates a visual focus/refocus elsewhere (e.g. potential installation which focuses views across Loch Katrine away from existing infrastructure.

YW.4 – Loch Katrine

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Road users, walkers / cyclists	240381, 708841	Close views of the line from the B829 approaching Loch Arklet.	B road.	M	Full 120°, side on view of 5 pylons, backclothed and skylined. The pylons detract from the view and dwarf the scale of the rugged hills.	H	View from a short section of road travelling north west.	M
2	Walkers/ cyclists, visitors to Stronachlachar	240461, 710222	Medium distance views of the line crossing the hills above, from the steam boat pier at Stronachlachar.	Steam boat pier, a popular visitor attraction marked on OS maps.	H	180° view of two groups of pylons – 9 to the south and 2 to the north west, skylined and backclothed. Elevated and angle towers are prominent.	H	Visually contained to the western end of Loch Katrine.	H
3	Walkers	239721, 710009	Close to medium distance views of the line crossing rugged terrain, from the Great Trossachs Path to the west of Stronachlachar.	On a waymarked path (Great Trossachs Path)	H	180° view of 8 pylons, backclothed and skylined. Angle towers to the north are prominent despite being backclothed. Some pylons located on prominent ridge tops.	VH	Open views from 1-2 km of footpath.	H
4	Motorists, cyclists and walkers on B829	240561, 708720	Located on B829 as the road emerges from the Loch Ard Forest and first views of line are available. Line located in close proximity at approximately 200m.	Open views westwards across Loch Arklet towards the enclosing ridges of Glen Arklet and to the distant summits of the Arrochar Alps which form the skyline beyond.	M	Towers in very close proximity to viewpoint and appear dominant located on slightly elevated ground adjacent to B829. Line appears as open views become available following emergence from the largely enclosed section of road alongside Loch Chon to the south.	H	Limited availability of similar views along this section of the B829 and viewpoint represents the first view of line after emerging from Loch Ard forest.	H
5	Road users, walkers / cyclists	238562, 709445	Distant views of the line crossing rugged terrain from the minor road / Great Trossachs Path on the north side of Loch Arklet. Represents the	On a minor road / waymarked path (Great Trossachs Path)	H	8 pylons visible on the distant horizon, mostly backclothed but those on the skyline are more prominent (1 in particular).	M	Approximately 1.5 km, travelling east.	M

YW.4 – Loch Katrine

			first view of the line when travelling east along Glen Arklet.						
7	Walkers and cyclists	237570, 713812	Close views of the line from the maintenance track, which also doubles as a core path in WLA.	Important view west along Glen Gyle from the top of Loch Katrine.	H	180° view of pylons, backclothed and skylined at times. An angle tower at the foot of the glen is prominent despite being backclothed. Line is very close proximity	H	Open views along the length of the track/core path.	H
7	Walkers/ cyclists, visitors	240591, 711918	Located at the MacGregors burial ground which juts into Loch Katrine from the eastern shore, north across the water from Stronachlachar. Approx. 900m from line.	Important historical setting, accessed from the Great Trossachs Path, and offers open views across and along the loch.	H	120° view of pylons, backclothed against the rugged topography of Maol Mor on the western shores of Loch Katrine. Towers dwarfed by the scale of the hills behind.	M	Open views from the burial ground and its approach, but main focus of view is across and along Loch Katrine from the walled burial ground.	M
8	Tourists, visitors on Sir Walter Scott steam	240973, 709990	Represents views from approximate route of the Sir Walter Scott Steamboat as it approaches Stronachlachar Pier. Approx. 600m from line.	Important transient route for tourists/visitors.	H	120-130° view of pylons, occasionally backclothed against the rugged topography of Maol Mor, but more often appearing skylined above Stronachlachar and the head of Loch Arklet to the west.	H	Views experienced for relatively long period of steamboat journey when travelling east-west along the loch.	H

Visual impacts from transient routes

The Great Trossachs Path traverses the shoreline of Loch Katrine following the private tarmac road between Stronachlachar and the pier at the southern end of Loch Katrine, and links Loch Katrine with Inversnaid and the West Highland Way alongside Loch Lomond to the west. The western extents of the path offer relatively open views of the transmission line, from a distance of 1-2km across the loch from the eastern shore, and within very close proximity from the western shores as the line runs parallel to the road as it approaches Stronachlachar from the north. The towers often appear dominant in views from this section of the path, located on higher ground above the road to the west. Adjacent to Loch Arklet the route of the path is open, with little screening from vegetation and offering open views across Loch Arklet to the craggy summits on the south side of the loch and Ben Lomond beyond. The transmission line passes over the ridge at the eastern extent of these hills, breaking the skyline for a short section but otherwise the towers appear backclothed against the underlying topography. Only a relatively small number of towers from this section of the overhead line are seen from this path, however in views east towards Loch Katrine the towers will appear skylined at the head of Loch Arklet at approximately 0.5-1km at its nearest point.

YW.4 – Loch Katrine

Transient views experienced from the Sir Water Scott Steamboat are also possible when travelling along Loch Katrine towards Stronachlachar where the pylons appear prominent on the skyline above the small settlement, and at the head of Loch Arklet to the west.

Views experienced by road users on the B829 (e.g. tourists in cars, cyclists, horse riders and walkers) are a key consideration, as the overhead line crosses perpendicular to the road at the head of Loch Arklet. This route is the primary access route to Stronachlachar and the overhead line forms a key focus of views for a 1-2km section of this route when travelling both north and south.

Summary description of visual impacts	
Close views of the pylons within this section of the line are available to sensitive receptors, including recreational users of the Great Trossachs Path, receptors on the Sir Walter Scott steamboat, residential receptors on the western shores of the loch and other visitors to this key tourist destination within the LLTNP. The pylons are sited on the rugged slopes above the loch, contouring around the headland near Stronachlachar and appear out of scale with other landscape elements e.g. houses and woodland. To the south, along Loch Arklet visibility reduces with distance and the pylons do not detract from key views west across the loch and to the Arrochar Alps which form the skyline beyond.	
Overall assessment of visual impact (L/M/H/VH)	**High**

YW.5 – Loch Arklet

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.5	Infrastructure	L8 275kV Steel lattice towers
Length of section	5.5 km	Survey team	LW/AB	Survey date	21/09/2015

Landscape and visual context

This section of the 275kV line passes south, south-westwards from close to the B829 south-east of the head of Loch Arklet. The line passes over a dip in the ridge between Beinn Uamha to the west and Stùc Gille Chonnuill to the east, contouring around the west of Lochan Mhàim nan Carn. The line then runs broadly parallel with the B829 and Loch Chon across open moorland/rough grazing to the west of the Loch Ard Forest, where it meets the remains of the derelict settlement of Cromer at the head of Gleann Dubh. From here the line heads south-east along the glen, before entering Loch Ard Forest.

Baseline Landscape character type(s) and key characteristics

This section is within the extensive **Highland Summits LCT**, the key characteristics of which are as follows:

- *Massive peaks and ridges highly visible, providing a scenic rugged backdrop to the glen.*
- *Complex geology, with intensely craggy hills cut by narrow glens;*
- *Strong pattern of exposed rock, crags, narrow glens cut deeply, often containing fast flowing rivers and waterfalls;*
- *Simple land cover of semi natural grassland with patchy heather, and bracken and bog on lower slopes;*
- *No settlement;*
- *Sense of remote wildness;*
- *Intensely craggy hills with steep slopes and rocky ridges.*

Special qualities of the designated area

Special Qualities of **Strath Gartney, Achray and Loch Ard Forests** area of the Trossachs that are evident within the landscape that surrounds this section are:

- *Combination of lochs, woodland and craggy slopes and summits gives a strong sense of place;*
- *Small settlements focused on the loch shores;*
- *Important industrial heritage includes dams, sluice houses, outflows and aqueducts which are all part of the Glasgow Corporation Water Works (1856 – 1859);*
- *Combination of ancient, semi-natural riparian and traditionally managed woodland fringe the shores of the loch;*
- *Loch Katrine inspired Sir Walter Scott's poem 'The Lady of the Lake' and there is a steam ship named after Sir Walter Scott which leaves from the harbour at Stronachlachar.*

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	VH	H	M	H	H	VH	H

Value

	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation	
L/M/H/VH	H	H	H	H	H	

YW.5 – Loch Arklet

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility			H		The pylons contrast with the rugged landform and distinctive land cover of loch, woodland and moorland in the vicinity of Loch Arklet. South of Loch Arklet the pylons are seen silhouetted against the skyline and detract from the scale of the rugged hills, interrupting the distinctive skyline where the line passes over the ridge. Views west across Loch Arklet towards the Arrochar Alps are generally unaffected by the presence of the line once west of the towers. Nevertheless the presence of the tall manmade structures detracts substantially from the open and remote character which is evident after emerging from Loch Ard Forest to the south.
Value			H		Many of the Special Qualities of the area are exhibited around Loch Arklet and the surrounding hills. Some areas of deforestation are a landscape detractor west of the B829. The road provides access to Stronachlachar and Loch Katrine, which are popular for recreation, and the Great Trossachs Path runs along the northern shore of Loch Arklet from where views of this section of the line passing over the ridge are possible.
Scale of the impact on the landscape		M			The pylons detract from some of the key characteristics of the area, including the strong sense of place created by the combination of loch, woodland and rugged hills. The line appears out of scale with the landscape in proximity to the B829, however as it heads southwards into the interior of the hills, the towers often appear dwarfed by the surrounding topography and hills.
Geographical extent of the impact on the landscape		M			Impacts are relatively localised to the northern end of this section where the line is seen skylined above the ridge in close proximity to Loch Arklet and the B829, before the line descends on the south side of the ridge and passes into the interior of the Highland Summits LCT.
Importance of the impact on the landscape		**M**			**Landscape impacts are notable, but evident over a relatively localised area at the edge of this LCT, where the line makes the transition from the more sensitive Straths & Glens with Lochs LCT and into the larger scale landscape type of the Highland Summits to the south. The area exhibits some of the Special Qualities attributed to the area, however these are limited to the area at the northern extent of this section, close to the B829 and Loch Arklet. Where the pylons are seen on the skyline as they pass over the ridge south of Loch Arklet they somewhat diminish the scale of the hills,**

Summary description of landscape impacts	
The transmission line becomes a notable feature in the landscape as receptors emerge from the forested area to the south, into the more rugged upland landscape of open character. Views to the enclosing ridges and distant hills become a feature of the landscape through which the line passes, however the presence of the line is only evident at this northern extent close to the B829 where its presence seems somewhat out of place with the character of the wider landscape. The impacts are relatively localised to the northern end of this section of line, where the pylons detract from the key characteristics and Special Qualities exhibited in this area.	
Overall assessment of landscape impact (L/M/H/VH)	**Moderate**

(See visual assessment on next page)

Key Issues

- The overhead transmission line crosses the main tourist road route between Aberfoyle and Stronachlachar pier on Loch Katrine, and becomes a notable feature when travelling east to west along the B829 as receptors emerge from the often wooded or forested road corridor west, north-west of Loch Chon, and receptors pass beneath the line just before the view opens up across Loch Arklet and receptors may stop to take in the view towards the Arrochar Alps, with the overhead line in close proximity behind them.
- Towers are often located in prominent positions as they cross the shoulder of higher ground between Loch Katrine and Loch Arklet are noticeable in views from the road when approaching from the east, and from across Loch Arklet when walking west to east on the Great Trossachs Path.
- Heavier towers located where the overhead line changes direction or elevation are highly noticeable in prominent positions close to receptors on the B829 when emerging from Loch Ard Forest, and often appear more prominent when in close proximity due to their elevated position above the level of the road.

Mitigation opportunities

- Undergrounding of transmission line in Glen Arklet, would require line to be undergrounded to north towards Stronachlachar to deliver any real benefit, due to the need to incorporate a terminal tower in the glen;
- Landscape enhancement along the corridor of the B829 to enclose visibility until beneath the transmission line where receptors will pass west of the line, and open views become possible across Loch Arklet.

YW.5 – Loch Arklet

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Walkers, visitors	239240, 709885	Located on route of Great Trossachs Path on north shore of Loch Arklet, approximately 1.1km from line.	Open views across Loch Arklet, from route of promoted trail.	M	Line visible passing over distinguishable rugged skyline ridge to the south of Loch Arklet where the towers appear prominent in the view. Doesn't affect views towards distant hills to the west.	M	Similar views possible from sections of path to west and east, impacts diminishing with distance to the west.	M
2	Motorists, cyclists and walkers on B829	240561, 708720	Located on B829 as the road emerges from the Loch Ard Forest and first views of line are available of the line passing over the ridge to the south-west. Line located in close proximity at approximately 600m.	Open views westwards across Loch Arklet towards the enclosing ridges of Glen Arklet and to the distant summits of the Arrochar Alps which form the skyline beyond.	M	Towers of YW.4 section also in very close proximity to viewpoint and appear dominant located on slightly elevated ground adjacent to B829. Line appears as open views become available following emergence from the largely enclosed section of road alongside Loch Chon to the south.	H	Limited availability of similar views along this section of the B829 and viewpoint represents the first view of line after emerging from Loch Ard forest.	H
3	Hill walkers, mountain bikers	238950, 704380	Derelict settlement of Cromer at the head of Gleann Dubh on route to Loch Lomond via Gleann Gaoithe. Close proximity to the line.	Remote and isolated view, experienced by few receptors who venture into these remote glens.	M	Line appears out of place with the remote setting and character of this glen, however the surrounding hills and ridges diminish the scale of the towers.	M	Similar views available from along Gleann Dubh to the east and Gleann Gaoithe to the north.	M
4	Hill walkers	236700, 702850	Represents views from the Munro hill summit of Ben Lomond (974m AOD). Approximately 2.5km from line.	Panoramic views from iconic Munro hill summit, experienced by large number of receptors.	H	Presence of line in view is distant and only discernible in clear visibility. Towers appear small in scale in comparison to the landscape they appear backclothed against at a much lower elevation than the viewer.	L	Similar views from nearby summits, however view towards line is not the main focus of the view.	M

YW.5 – Loch Arklet

5	Walkers, visitors, fisherman, campers.	241823, 706419	Located alongside Loch Chon and B829 at popular camping and fishing spot.	Open views from loch side across Loch Chon to the often forested enclosing ridges.	M	Small number of towers visible on distant skyline to the west, partially appearing above the Loch Ard Forest but largely imperceptible to most receptors	L	Very limited availability of similar views due to presence of forestry which screens towers and woodland cover around the loch.	L

Visual impacts from transient routes

The Great Trossachs Path traverses the northern shoreline of Loch Arklet to the north of the public road, linking Stronachlachar and Loch Katrine to the east, with Inversnaid and the West Highland Way alongside Loch Lomond to the west. The route of the path is open, with little screening from vegetation and offering open views across Loch Arklet to the craggy summits on the south side of the loch and Ben Lomond beyond. The transmission line passes over the ridge at the eastern extent of these hills, breaking the skyline for a short section but otherwise the towers appear backclothed against the underlying topography. Only a relatively small number of towers from this section of the overhead line are seen from this path, however in views east towards Loch Katrine the towers will appear skylined at the head of Loch Arklet at approximately 0.5-1km at its nearest point.

Views experienced by road users on the B829 (e.g. tourists in cars, cyclists, horse riders and walkers) are a key consideration, especially when travelling north to south where towers appear skylined on the ridge to the south. This route is the primary access route to Stronachlachar and the overhead line forms a key focus of views for a 1-2km section of this route when travelling both north and south.

Summary description of visual impacts

Close proximity views of towers experienced by a relatively large number of sensitive receptors are often quite fleeting, limited to views when travelling north and south on the B829 and in views from the Great Trossachs Path on the north side of Loch Arklet. Receptors on the Sir Walter Scott steamboat are also possible, however the key focus of views is towards Stronachlachar pier and the backdrop of craggy hills beyond. The pylons often appear backclothed in views, unless in very close proximity on the B829, and the overhead line is generally well routed, passing over the obvious low point of the ridge line to the south of Loch Arklet, limiting the skylining of towers from the most sensitive locations and receptors. When seen in close proximity the towers appear out of scale with other landscape features (e.g. trees, fence lines) often accentuated by the elevated location of towers adjacent to the B829. The key focus of views in this area are across Loch Arklet towards the Arrochar Alps which form the skyline beyond to the west.

Overall assessment of visual impact (L/M/H/VH)	**Moderate**

YW.6 – Loch Ard Forest Central

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.6	Infrastructure	L8 275kV Steel lattice towers
Length of section	12.5 km	Survey team	LW/AB	Survey date	16/09/2015

Landscape and visual context

This section of the line crosses the Loch Ard Forest, a rolling, forested plateau crossed by small burns e.g. the Duchray Water. The forest is relatively inaccessible, except for forestry / water board tracks and mountain biking trails. There are some areas of semi-natural and planted broadleaved woodland e.g. Blairvaich Wood, and some heather moorland. The forest has a rugged backdrop of hills to the south and west, including Beinn Bhreac (579 m AOD) and Ben Lomond (974 m AOD). The Rob Roy Way crosses under the line south of Drum of Clashmore at the south-eastern end of the section.

Baseline Landscape character type(s) and key characteristics

The majority of this section is within the **Rolling Forested Plateau LCT**, the key characteristics of which are as follows:

- Rolling terrain with linear ridges and knolls;
- Mainly coniferous forestry, some broadleaved woodland fringes;
- Duchray Water – a key feature within Loch Ard;
- Sparsely settled, predominantly forestry and water board uses;
- Pylon way leaves are prominent; and
- Popular for recreation e.g. walking, cycling and horse riding.

The south-eastern end of this section is within the **Parallel Ridges LCT**;

- Distinctive landform, obscured by coniferous plantation;
- Merges into the extensive Loch Ard Forest; and
- Views to Ben Lomond.

The north western end of this section is within the **Highland Summits LCT**;

- Craggy hills cut by narrow glens;
- Semi natural grassland with patchy heather, and bracken and bog on lower slopes;
- Massive peaks and ridges are important landmark features e.g. Ben Lomond; and
- No settlement, sense of wildness but some infrastructure present e.g. power lines and tracks.

Special qualities of the designated area

Special Qualities of **Strath Gartney, Achray and Loch Ard Forests** area of the Trossachs that are evident within the landscape that surrounds this section are:

- Huge commercial plantations of the Loch Ard Forest cover much of the landform of the area;
- Important industrial heritage - dams, sluice houses, outflows and aqueducts which are all part of the Glasgow Corporation Water Works (1856 and 1859);
- Some areas of broadleaved woodland occur amongst planted conifers.

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	H	L	L	L	H	M	M

Value

	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation
L/M/H/VH	M	M	L	M	M

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility		M			Extensive plateau landscape with a rugged landform of small knolls and ridges, and simple land cover of mainly coniferous forestry. The pylons are better integrated in the south-east where they are cross lower ground. In the north west they cross the side of a hill and are more visible, and detract from the scale of the rugged backdrop of landmark hills e.g. Ben Lomond.
Value		M			The area exhibits some of the special qualities of the LLTNP, most notably its aqueducts, some semi-natural broadleaved woodland and the rugged backdrop of hills including Ben Lomond. The landscape is predominantly a commercial plantation, and degraded in parts e.g. where felling has occurred.
Scale of the impact on the landscape		M			The impact on the landscape is lower in the south-east, where the pylons are integrated with the forestry. In the north west the forestry opens up to reveal views of a rugged backdrop, and in some places the pylons here detract from and diminish the scale of the hills.
Geographical extent of the impact on the landscape		M			Impacts are generally contained by the landform and trees to within the Loch Ard Forest area, although some intervisibility with the hills behind will occur e.g. pylon wayleaves are visible from Ben Lomond.
Importance of the impact on the landscape		**M**			**This section of line conflicts with some of the key characteristics of the area and its Special Qualities, including the rugged, knolly terrain and the rugged backdrop of hills. Impacts are particularly notable in the north west where the line crosses the slope above Gleann Dubh due to the wayleave contrasting with surrounding felled forestry.**

Summary description of landscape impacts	
Landscape impacts are more pronounced in the north west, where the pylons appear out of scale with the coniferous plantation and diminish the scale of the rugged backdrop of hills including Ben Lomond. Landmark hills are a key characteristic of the area. In the south-east the pylons appear out of scale with landscape features such as the aqueducts and the small scale knolls and ridges, but are sited lower within the forest and are therefore better integrated.	
Overall assessment of landscape impact (L/M/H/VH)	**Moderate**

(See visual assessment on next page)

Key Issues

- The pylon wayleave is visible from Ben Lomond and surrounding peaks at a relatively long distance as it crosses above Gleann Dubh. The prominence of the linear wayleave within which the transmission line is located is often more perceptible than the infrastructure itself. In some areas of recent commercial forestry felling, large areas of brash area evident either side of the wayleave which contrasts with the underlying vegetated wayleave (low shrubbery and open grassland).
- Impacts will potentially change as commercial forestry is felled and replanted over the coming years, as part of established or new forestry management plans.

Potential mitigation opportunities

- Potential undergrounding or Re-routeing of the infrastructure through this vast area of commercial coniferous forestry is likely to lead to similar landscape impacts, as a necessary wayleave will still be required for an underground cable route, and any realignment of the transmission line will unavoidably have to pass through commercial forestry;
- Feathering of existing wayleave edges to reduce the linear and geometric nature of the forestry, with mixed woodland creation (native broadleaf and coniferous species) to reduce the perceptibility of the wayleaves;
- Long-term restructuring of the wider forestry network either side of the existing wayleave, to reduce the prominence of geometric forestry edges running in parallel with the transmission line. This would require the design and adoption

Summary of landscape impacts	L	M	H	VH	Comments
of new forestry management plans to control the felling and restocking of forestry, and maintain the long-term mitigation which any such scheme could achieve; • Minor re-routeing of the Rob Roy Way long distance footpath where it passes beneath and in close proximity to the overhead line. This would be best coupled with a minor restructuring of the forestry along any re-route of the footpath to improve screening of the overhead line, including in the absence of the surrounding commercial forestry following any felling which takes place.					

YW.6 – Loch Ard Forest Central

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Cyclists, walkers, horse riders	244926, 700150	Very close range views of the line from a forest track within Loch Ard Forest, with Beinn Bhreac (579 m AOD) visible beyond. View contained by landform and trees.	Forestry track, not a waymarked trail.	L	3 pylons are visible, elevated above the viewer on the skyline. The forest provides some screening of the line.	M	Glimpsed views from forest track, with trees providing intermittent screening.	L
2	Cyclists, walkers, horse riders	242804, 701534	Medium distance views of the line from a forest track. Backclothed by forested hill slopes.	Forestry track, not a waymarked trail.	L	Level, medium distance views of up to 6 pylons across heather moorland and young plantation forestry. Pylons are backclothed.	M	Views from a short section of forest track which skirts a clearing in the forest.	M
3	Cyclists, walkers, horse riders	241879, 702772	Close to medium distance views of the line running along the hill slopes above the Duchray Water valley, backed by rugged hills including Ben Lomond (974 m AOD).	Forestry track, not a waymarked trail.	L	Close to medium views looking down and across from the track to 4 pylons. The pylons are mainly backclothed but appear out of scale with the rugged hills beyond, detracting from the view.	H	Glimpsed views from clearings in the forest for approximately 1-2 km.	M
4	Hill walkers	236700, 702850	Represents views from the Munro hill summit of Ben Lomond (974m AOD). Approximately 2.5km from line.	Panoramic views from iconic Munro hill summit, experienced by large number of receptors.	H	Presence of line in view is distant and only discernible in clear visibility. Towers appear small in scale in comparison to the landscape and at a much lower elevation than the viewer, however the visibility of the linear wayleave through forestry exacerbates visibility of the line as it passes south-east along Gleann Dubh.	L	Similar views from nearby summits, however view towards line is not the main focus of the view.	M

Visual impacts from transient routes	
A number of recreational footpath routes (core paths) and mountain bike trails pass through the Loch Ard Forest to the south and west of Loch Ard, generally following forestry access tracks from which views are often contained by the presence of dense commercial forestry. The overhead line is therefore not frequently visible, often limited to glimpsed views where forestry tracks pass beneath the overhead line and views are possible along the wayleaves. At the eastern extent of this section, the overhead line crosses the route of the Rob Roy Way long distance footpath at the point where the overhead line reaches the edge of the forestry near Kelly Water. The Rob Roy Way follows a wide forestry access track along this section, and the overhead line wayleave meets perpendicular to the track forming a large clearing where views are possible along the wayleave to the north-west as the route of the footpath twists beneath the overhead line for a short length before passing into the coniferous forestry to the north. Visibility of this section in views from the B829 north of Loch Ard and Loch Chon are screened by intervening topography and coniferous forestry which forms the skyline to the south.	
Summary description of visual impacts	
In the south-east views of this section of line are restricted to glimpsed views from the forest tracks, some of which are close as the line crosses over the track in places. Otherwise the forestry provides effective screening of the line. In the north-west the forest track is more elevated and the forest structure more open, so prolonged views of the overhead line are available. This section of overhead line, and often importantly its linear wayleave, detracts from views to and from Ben Lomond, particularly when the track is on the north side of the overhead line.	
Overall assessment of visual impact (L/M/H/VH)	**Moderate**

YW.7 – Loch Ard Forest South

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.7	Infrastructure	L8 275kV Steel lattice towers
Length of section	3.5 km	Survey team	LW/AB	Survey date	16/09/2015

Landscape and visual context

This section of line begins on the elevated moorland ridge between Green Hill (270 m AOD) and Bàt a' Charchel (230 m AOD), before dropping down through the fringes of the Loch Ard Forest into a small scale farmed area in the vicinity of Corrie. The line crosses part of the Rob Roy Way (forest track) at the southern edge of the clearing. This section ends at the Kelty Water, a burn on the northern edge of the clearing. Dramatic, rugged backdrop of hills to the north including the Menteith Hills and Ben Ledi.

Baseline Landscape character type(s) and key characteristics

South of Corrie the line passes through the **Plateau Moor and Forest LCT**. Its key characteristics are as follows;

- Rounded moorland summits and plateau-like landform (e.g. Moor Park); and
- Conifer plantations.

North of Corrie this section of line is located within the **Parallel Ridges LCT**;

- Distinctive landform, obscured by coniferous plantation in some areas;
- Merges into the extensive Loch Ard Forest;
- Lower slopes are wet grazed with pasture;
- Distinctive backdrop of the Menteith Hills; and
- Views to Ben Lomond.

Special qualities of the designated area

Special Qualities of **Strath Gartney, Achray and Loch Ard Forests** area of the Trossachs that are evident within the landscape that surrounds this section are:

- Views to Ben Lomond;
- Parallel ridges are of high geological importance; and
- Managed lowland landscape forms a foreground to more dramatic hill ranges.

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	M	H	H	L	H	H	M

Value

	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation
L/M/H/VH	M	H	M	L	M

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility		M			Broad, open moorland and forestry, with a more complex land cover in the vicinity of Corrie, comprising pasture, wet grassland, clumps of woodland and farmsteads set in woodland. Some small landmark hills are distinctive features e.g. north east of Corrie.

YW.7 – Loch Ard Forest South

Value		M			This is a varied landscape, forming the foreground to more dramatic views across the LLTNP, including views of Ben Ledi and Ben Venue. The area is accessible only via forest tracks, which include the Rob Roy Way.
Scale of the impact on the landscape			H		The pylons in this section detract from the distinctive landform and varied land cover associated with the Parallel Ridges LCT which extends north east and south west of the line in the vicinity of Corrie. The line is in the foreground of a dramatic backdrop of hills within the LLTNP.
Geographical extent of the impact on the landscape	L				Generally this section is screened by forestry, or visible in more distant views. Perceived locally in the vicinity of Corrie.
Importance of the impact on the landscape		**M**			**The line conflicts with the small scale nature of the landscape in the vicinity of Corrie, where the pylons cross a small farmed area within the wider Loch Ard Forest, detracting from the rugged backdrop of hills. Only a small geographical area is affected.**

Summary description of landscape impacts

This section of line crosses an elevated area of forest between Green Hill and Corrie, where the pylons appear in keeping with the large scale moorland and often densely forested landscape. It is where they cross the smaller scale farmed landscape of the Parallel Ridges LCT that the pylons appear to dominate the landscape, and detract from the rugged upland backdrop to the landscape. Only a small, visually contained area is affected.

Overall assessment of landscape impact (L/M/H/VH)	**Moderate**

(See visual assessment on next page)

Key Issues

- The pylon wayleave is visible from elevated locations within the vicinity of the Loch Ard Forest, often at a relatively long distance. The prominence of the linear wayleave within which the transmission line is located is often more perceptible than the infrastructure itself.
- Access and recreation is a key consideration in this part of the Loch Ard Forest, including the route of the Roby Roy Way long distance footpath and the NCR7 route. A series of mountain bike trails and footpaths, predominantly following the network of forestry access tracks offer views of the existing line and its wide wayleave.
- Pylons crossing Moor Park are noticeable against the skyline due to their elevation. There is a particularly prominent pylon to the north of Corrie, with noticeable access track. The prominence of the linear wayleave within which the transmission line is located is often more perceptible than the infrastructure.
- Impacts will potentially change as commercial forestry is felled and replanted over the coming years, as part of established or revised forest management plans.

Potential mitigation opportunities

- Re-route the line through the Loch Ard Forest away from the farmed landscape, or relocate the route of the Rob Roy Way long distance footpath to reduce views of the OHL;
- Minor re-routeing of the Rob Roy Way long distance footpath where it passes beneath and in close proximity to the overhead line. This would be best coupled with a minor restructuring of the forestry along any re-route of the footpath to improve screening of the overhead line, including in the absence of the surrounding commercial forestry following any felling which takes place;
- Develop forestry management plan for replanting of native coniferous and deciduous woodland which maximises long term screening of the OHL in the future;
- Smaller scale/reduced height pylons (L3 or similar) may relate better to the scale of the Parallel Ridges LCT;
- Undergrounding of this section of line in full or partially where the line is located out with forestry, however potential undergrounding or Re-routeing of the infrastructure within the areas of commercial coniferous forestry is likely to lead to similar landscape impacts, as a necessary wayleave will still be required for an underground cable route, and any realignment of the transmission line will unavoidably have to pass through commercial forestry.

YW.7 – Loch Ard Forest South

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Walkers (Rob Roy Way), local farmsteads	248888, 794668	Close to medium range views of the line passing across farmland with a rugged backdrop of hills, and onto forested slopes as the line heads south.	Forest track, part of the Rob Roy Way.	H	Close, open views of up to 5 pylons which occupy a large proportion of the view. Skylined and backclothed against rugged hills to the north. Pylons appear out of scale with the farmed Parallel Ridges landscape. Access tracks to the tower bases are also visually prominent.	H	Similar view from c. 2 km of forest track / Rob Roy Way.	H
2	Walkers (Rob Roy Way), local farmsteads	249072, 794457	Close range views of the line as it passes over the forest track / Rob Roy Way, across forestry, pasture and uncultivated ground.	Forest track, part of the Rob Roy Way.	H	Close views of the line, occupying 180°of the view. Pylons appear stacked and on the skyline to the north, and stacked and backclothed by rugged hills to the south. View contained by vegetation to the south	H	More contained view than VP01.	H
3	Road users	250772, 794108	Medium range views of the line to the west (approximately 2 km away) across felled coniferous forestry, from the minor road south of Dalmary (NCN 7). Ben Lomond visible to the west, beyond the line.	Minor road.	L	Medium distance views of up to 6 pylons are visible, mainly skylined above Loch Ard Forest, but some backclothed also (and therefore less visible).	L	Similar views from c. 2 km of minor road.	L

Visual impacts from transient routes

The Rob Roy Way long distance footpath runs parallel with a proportion of this section of overhead line to the west of Corrie. The route follows the eastern edge of the Loch Ard Forest and offers views east across rough grazing through which the overhead line passes from north-west to south-east, forming a key feature ion the view. Views west and south from the route are contained by the presence of the adjacent commercial forestry. South of Corrie the overhead line crosses the route of the Rob Roy Way before heading southwards through forestry towards the open moorland of Moor Park. To the east of the line the Rob Roy Way passes through dense coniferous forestry, meandering along forestry tracks to emerge at the minor road to the east near Drymen Road Cottage.

YW.7 – Loch Ard Forest South

The minor road also forms the route of National Cycle Route 7 (NCR7) linking Drymen and Aberfoyle via the Old Military Road over Moor Park. Following recent felling of commercial forestry north of Drymen Road Cottage, open views west, towards the overhead line are possible for a 1km section of this route when travelling south, with the towers appearing on the skyline above the underlying commercial forestry.

Longer distance views of this section of line are also possible when travelling along the A81 to the east of the National Park boundary, where towers appear across the skyline for a number of kilometres when travelling south from Aberfoyle as the road ascends to the west of Flanders Moss.

Summary description of visual impacts
This section of the line crosses the Rob Roy Way and therefore close views are likely to be available to large numbers of visitors. The line detracts from the small scale wooded hills and rugged upland backdrop for a short section (c. 2 km). Otherwise there are few visual receptors in this area which is only accessible via forest tracks and largely contained by forestry.

Overall assessment of visual impact (L/M/H/VH)	**High**

YW.8 – East of Drymen

Designated area	Loch Lomond & the Trossachs NP	Route/section code	YW.8	Infrastructure	L8 275kV Steel lattice towers
Length of section	6 km	Survey team	LW/AB	Survey date	16/09/2015

Landscape and visual context

This most southerly section of the 275kV line starts west of Upper Gartness where the line crosses a minor road (part of the West Highland Way and John Muir Way) into the LLTNP boundary. The line runs parallel with the LLTNP boundary across rolling farmland and narrow wooded valleys for approximately 2 km, before it crosses the A811 / Old Military Road. From here the line crosses through farmland on the edge of coniferous forestry (some recently felled). The line crosses briefly out of the LLTNP south of Muir Park Reservoir, before passing over a minor road (part of the Rob Roy Way / National Cycle Route 7). This section finishes on the ridge line between Green Hill (270 m AOD) and Bàt a' Charchel (230 m AOD).

Baseline Landscape character type(s) and key characteristics

South of the A811, this section of line passes through the **River Valley Farmlands with Estates LCT**. Its key characteristics are as follows:

- *Complex rolling valley landform (Endrick Water and tributaries);*
- *Farmed and settled, with small pastoral fields and occasional broadleaf trees;*
- *Estates and wooded policies;*
- *Open views.*

North of the A811 this section of line passes through the **Plateau Moor and Forest LCT**. Its key characteristics are as follows:

- *Gently rounded, undulating hills of open grassland and heather moorland, with forestry;*
- *Lower slopes farmed with pasture;*
- *Crossed by roads and access tracks;*
- *Elevated views possible.*

Special qualities of the designated area

Special Qualities of **Strath Gartney, Achray and Loch Ard Forests** area of the Trossachs that are evident within the landscape that surrounds this section are:

- *Wetland habitat and bog (Plateau Moorland LCT);*
- *Farmed landscapes with historic field boundaries (River Valley Farmlands with Estates LCT);*
- *Roman roads and Roman Fort at Drumquhassle (River Valley Farmlands with Estates LCT).*

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	L	M	M	L	L	M	M

Value

	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation	
L/M/H/VH	L/M	M	M	M	H	

Summary of landscape impacts	L	M	H	VH	Comments

YW.8 – East of Drymen

Susceptibility		M			Landform differs to the north and south of the A811. To the south of the A811 (LCT 11) the landscape is of rolling farmland and woodland, to the north it is characterised by rough grazing, moorland and forestry.
Value		M			South of the A811 the farmland displays some of the Special Qualities of the LLTNP, with intact field patterns and roman roads and a fort. North of the A811 the landscape is more lacking in Special Qualities, except for some wetland/bog habitat.
Scale of the impact on the landscape		M			The scale of the pylons are generally well accommodated in both the relatively broad valley farmland south-east of Drymen, and the open rolling moorland north east of Drymen. The pylons detract from the wild qualities of the moorland landscape in the vicinity of Muir Park Reservoir.
Geographical extent of the impact on the landscape			H		Wide geographical extent, particularly from open moorland areas where prolonged views will be available. In the farmed areas the shelterbelts and roadside hedgerows provide some screening.
Importance of the impact on the landscape		**M**			**Overall, the line is highly visible in this section, but the landscape displays few of the Special Qualities associated with the LLTNP, and the line does not undermine its key characteristics of open moorland and settled farmland.**

Summary description of landscape impacts

This section of line crosses an elevated area of forest between Green Hill and Corrie, where the pylons appear in keeping with the large scale moorland and often densely forested landscape. It is where they cross the smaller scale farmed landscape of the Parallel Ridges LCT that the pylons appear to dominate the landscape, and detract from the rugged upland backdrop to the landscape. Only a small, visually contained area is affected.

Overall assessment of landscape impact (L/M/H/VH)	**Moderate**

(See visual assessment on next page)

Key Issues

- Pylons crossing Moor Park are noticeable against the skyline due to their elevation, from what is a well-used and visited part of the National Park, especially by recreational users using long distance footpath and cycle routes. There is a particularly prominent pylon to the south of Corrie, with a noticeable access track.
- This area of the National Park serves as an informal gateway through which many visitors and tourists access the National Park, as they pass from the settled farmland landscape at the edge of the park and into the more remote upland landscapes.
- Impacts will potentially change as commercial forestry is felled and replanted over the coming years, in line with the existing or any refined forest management plan.

Potential mitigation opportunities

- Re-route the transmission line through the Loch Ard Forest away from the farmed landscape east of Drymen;
- Relocation of the route of the Rob Roy Way long distance footpath to reduce views of the transmission line;
- Develop a forestry management plan for replanting of native coniferous and deciduous woodland which maximises long term screening of the transmission line in the future, whilst avoiding the creating of typically linear wayleaves;
- Smaller scale/reduced height pylons (L3 tower or similar) may relate better to the scale of the Parallel Ridges LCT;
- Undergrounding of this section of transmission line in full or partially where the overhead line is located out with forestry.

YW.8 – East of Drymen

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Walkers and cyclists (Rob Roy Way and NCR 7), local road users	248715, 691303	Close range views of the line from a minor road which is part of the Rob Roy Way, on elevated moorland. Distant views to Ben Ledi to the north east and the Campsie Fells to the south-east.	Road side view on the Rob Roy Way.	H	Close to medium views of up to 8 pylons across 180°. Mostly skylined, some partially backclothed. Pylons generally in keeping with the scale of the open moorland plateau.	H	Similar views available from c. 1.5 km of the road / Rob Roy Way.	H
2	Walkers and Cyclists (West Highland Way), local farms and road users	248480, 687834	Medium range views of the line crossing rolling farmland (pasture, shelterbelts and small areas of woodland, farmsteads), from a minor road which is part of the West Highland Way. Backed by the Campsie Fells.	Road side view on the West Highland Way.	H	Medium distance views of up to 20 pylons across 180°. Skylined and backclothed by rolling farmland and the Campsie Fells, generally in keeping with the scale of the broad valley.	M	Glimpsed views available from the road, partially screened by road side hedge.	M
3	Residential receptors at local farms and road users	249477, 688595	Close, to medium range views of the line crossing farmland and small wooded valleys from the minor road which forms the boundary of the LLTNP, at the entrance to Blairoer Farm.	Minor road / farm access track.	L	Close views of up to 10 pylons across 180°. Skylined and backclothed, with some stacking and side on views of angle towers in views to the north.	H	Lots of glimpsed views available from the minor road, occasionally screened by road side vegetation.	M
4	Walkers and Cyclists (West Highland Way & John Muir Way), local farms and road users	249550, 686690	Close proximity views of the overhead line as receptors enter the National Park travelling on foot or by bicycle along the minor road west of Gartness.	Road side view on the West Highland Way.	H	Close range views, towers appear large in scale and dominate the vertical scale of the landscape in this area as towers are positioned to cross Endrick Water as the overhead line heads south out with the National Park.	H	Glimpsed views available from the road, partially screened by road side hedge and field boundary trees.	H

YW.8 – East of Drymen

Visual impacts from transient routes

A number of recreational routes are located in the vicinity of this section of the overhead line, including NCR7, the Rob Roy Way, the John Muir Way and the West Highland Way. At its most northerly extent the overhead line crosses the open moorland of Moor Park to the east of Muir Park Reservoir before crossing the minor road near the summit of Bàt a' Charchel (230m AOD) which forms the route of NCR7 and the Roby Roy Way. Receptors on these routes experience open views from along 1-1.5km section of this route, with the towers forming a key focal feature within the upland moorland setting, however other vertical elements are visible including the telecommunications mast on Bàt a' Charchel. Further south, NCR7 and the Rob Roy Way pass into the dense coniferous cover of the Garadhban Forest at which point the West Highland Way long distance footpath crosses the minor road running predominantly within the commercial forestry.

To the south of the Garadhban Forest the West Highland Way passes through rolling farmland, running parallel with the overhead lune as it skirts along the boundary of the National Park to the east. To the west of Gartness the overhead line crosses the route of both the West Highland Way and the John Muir Way, before passing southwards out with the National Park. From a section of these routes the overhead line forms a clear focus of views when travelling in both directions, but most specifically when entering the National Park via the routes from the east.

From the A811, which passes beneath the overhead line to the east of Drymen, fleeting views of towers and the lines are possible as receptors travel both east and west along this road, however receptors will often be travelling at speed and views are partially screened by the presence of intervening roadside vegetation and field boundary trees.

Summary description of visual impacts

This section of overhead line has a widespread visual influence in this section, with the network of roads and farm tracks providing some very close views, including from the Rob Roy Way, West Highland Way and John Muir Way, and National Cycle Route 7. These are popular walking and cycling routes which offer some prolonged views of the overhead line to a large numbers of receptors who may be entering or leaving the National Park at what is an unofficial gateway through which many access the park, particularly in the open moorland areas in the vicinity of Moor Park. The area acts as a gateway to the National Park when approaching from the east, and the overhead line is also visible to receptors travelling on the A811, the main route into the National Park from the south. The overhead line is also visible from a number of residential properties and farmsteads in close proximity, to the east of Drymen.

Overall assessment of visual impact (L/M/H/VH)	**High**

CL/CK1 – Glen Fruin

Designated area	Loch Lomond & the Trossachs NP	Route/section code	CL/CK1	Infrastructure	Two parallel OHLs - L4 132kV Steel Lattice Towers
Length of section	6 km	Survey team	LW/AB	Survey date	21/09/2015

Landscape and visual context

These two steel lattice tower parallel lines runs through the southern edge of the LLTNP at Glen Fruin – a broad valley with a flat floodplain rising to low hills, which are higher to the north. A minor road providing access to local farmsteads runs along the valley floor, parallel to the meandering Fruin Water. The A817 also runs through the glen, on the upper valley sides. The line crosses pastoral fields enclosed by dry stone walls, with traditional farm buildings and scattered mature broadleaved trees. The skirts the edge of two straight edged conifer plantations at its north western end.

Baseline Landscape character type(s) and key characteristics

The line passes mainly through the **Straths and Glens LCT** within this section, the key characteristics of which are as follows:

- *U shaped valley with a wide, flat floodplain;*
- *Improved pasture enclosed by fences and dry stone dykes, with some wetter areas;*
- *Small, regular shaped plantations;*
- *Road corridors follow the strath;*
- *Open views along and across the strath.*

In the south-east, the line passes across the **Parallel Ridges LCT**:

- *Highly visible and important landmarks in local and wider landscapes, contributing to the unique scenic character of the Highland Boundary Fault Zone;*
- *Long and narrow parallel ridges with scrub-filled near vertical gullies cut into steep outer slopes give a 'toothed' hummocky profile in some views;*
- *Coniferous woodland, planted on outer slopes, obscures the distinctive landform of these ridges in some areas;*
- *Occasional small water bodies, burns, damp mossy hollows and species-rich grassland occupy narrow linear channels between ridges. Lower slopes are grazed with pastures often wet and invaded by rushes or bracken;*
- *This landscape is not settled and man-made elements are limited to forest tracks and paths. Occasional masts sited on high ridges are prominent;*
- *Relict historic landscapes, pre-improvement farmsteads and field systems and shielings are present and there is also a distinct distribution of prehistoric archaeology such as, cairns and cup-and-ring marks.*

Special qualities of the designated area

Special Qualities of the **Luss Hills** that are evident within the landscape that surrounds this section are:

- *Smooth slopes with sweeping summits and ridgelines;*
- *Farmed upland glen with traditional land management;*
- *Upper slopes provide mosaic of semi-natural grassland and moorland;*
- *Cultural associations – the Battle of Glen Fruin took place in 1603.*

Landscape Assessment

Susceptibility

	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	L	M	L	M	L	M	L

Value

	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation	
L/M/H/VH	L	M	M	M	M	

CL/CK1 – Glen Fruin

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility		M			Broad, U shaped valley with a relatively simple landcover of pasture and small conifer plantations, with moorland on upper valley sides. The pylons are accommodated within the broad valley, and are generally backclothed by moorland slopes. The double row of pylons is a noticeable element in a landscape with few other vertical elements (except conifer plantations). The landscape is farmed and settled, with some wilder qualities on the upper moorland slopes.
Value		M			Few of the Special Qualities associated with the Luss Hills are demonstrated within Glen Fruin. The landscape is relatively intact, with some features of interest e.g. mature broadleaf trees and vernacular buildings and walls, with a moorland backdrop. Recreational opportunities are limited to some walking routes e.g. the Three Lochs Way.
Scale of the impact on the landscape		M			Overall the scale of the line is in keeping with the scale of the farmed and settled landscape, although the double row of pylons is a visible landscape feature. In the west of Glen Fruin, within the LLTNP boundary, the pylons tend to be backclothed, and are better integrated than in the east around East Kilbride where they cross the slope against the skyline and stacking occurs.
Geographical extent of the impact on the landscape		M			The line is highly visible from within Glen Fruin, with little screening available. The influence of the line is generally contained within the glen and does not influence the wider LLTNP.
Importance of the impact on the landscape		**M**			**The line is relatively well integrated in this farmed and settled landscape, although the double row of pylons is highly visible in views along and across the glen.**

Summary description of landscape impacts

Glen Fruin is an intact farmed upland glen, which is typical of its character type, but doesn't display many of the Special Qualities of the LLTNP. Overall the overhead lines through the glen are well integrated with the farmed and forested landscape, matching the scale of nearby conifer plantations and groups of mature broadleaf trees located around farmsteads. The towers are an unmistakeable element in the landscape, particularly where they break the skyline at the northern and southern extents of the glen.

Overall assessment of landscape impact (L/M/H/VH)	**Moderate**

(See visual assessment on next page)

Key Issues

- Pylons at the eastern end of the lines, near the LLTNP boundary are visible on the skyline and can be seen stacking. Generally the line is straight as it passes through the glen, with few angle towers.
- Presence of parallel transmission line exacerbates the impact of the infrastructure within this settled valley. The presence of the parallel access track extends the influence of the infrastructure, albeit that it is used for recreation as part of the Three Lochs Way which passes through the glen.

Potential mitigation opportunities

- Re-routeing of the transmission lines to the south of the ridge which forms the southern slopes of Glen Fruin, and outside of the National Park boundary;
- Undergrounding of the transmission lines through Glen Fruin;
- Landscape enhancement, through the planting of native woodland, along the route of the Three Lochs Way as it passes through the glen and in close proximity to the existing infrastructure;
- Replacement of the existing twin parallel transmission lines with one larger capacity line through the glen.

CL/CK1 – Glen Fruin

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Road users, walkers on the Three Lochs Way	227460, 689967	Medium to long range views of the double staggered row of pylons crossing the broad Glen Fruin, from the edge of the LLTNP.	Road side view / Three Lochs Way waymarked route	M	The pylons are mainly backclothed against the moorland slopes on the side of the glen and their scale reflects the settled nature of the valley.	M	Open views from the majority of the minor road which runs along the floor of the glen.	M
2	Road users, walkers on the Three Lochs Way	229175, 688570	Medium range views of the double staggered line across the flat flood plain contained by low hills to the south, with straight edged conifer plantations and scattered mature broadleaf trees.	Road side view / Three Lochs Way waymarked route	M	The pylons are mostly backclothed, although some skylining and stacking occurs at the eastern end of the line. Up to 30 pylons are visible. Their scale reflects the settled nature of the valley.	M	Open views from the majority of the minor road which runs along the floor of the glen.	M
3	Recreational users of Three Lochs Way	230562, 686417	Medium range views as the double line crosses the upper slopes on the south side of the glen. Views are focused north into the LLTNP.	Three Lochs Way waymarked route	M	Up to 7 pylons are visible, crossing the skyline in a staggered row above the viewpoint.	M	Similar views from a short section of the minor road to the A818.	M
4	Recreational hill walkers	228630, 686125	Summit of Tom na h-Airidh (354m AOD) offering medium range views into the National Park from the enclosing ridge between Glen Fruin and Helensburgh which forms the south-western boundary of the National Park. The line is located at a lower elevation on the slopes of Glen Fruin below.	Locally valued landmark hill which is easily accessible and well visited from Helensburgh by recreational walkers.	M	The full extent of these section of parallel overhead lines are visible from this elevated hill summit, however the line appears at a lower elevation and is backclothed by the underlying landscape. The adjacent parallel access track appears more noticeable in the view, contouring along the lower slopes of the glen.	M	Similar views available from the neighbouring hills and ridges.	M

Visual impacts from transient routes

CL/CK1 – Glen Fruin

Within Glen Fruin the overhead line forms a key linear feature which runs in parallel to a number of transitory routes through the glen, including the A817 and minor road which run through the foot and lower slopes of the glen north of the transmission lines. From these road routes receptors experience elongated views of the infrastructure, often appearing backclothed against the southern slopes of the glen and perpendicular to the main focus of the view either north-west or south-east along the glen. At the eastern extent of Glen Fruin, but out with the National Park Boundary, visibility of the parallel lines is possible from the A818 and the adjacent John Muir Way long distance footpath which crosses west-east beneath the overhead lines, linking Helensburgh and Balloch.

Summary description of visual impacts	
This section of parallel line is highly visible from the majority of the glen, which is broad, straight and open. Visual receptors include local farmsteads, users of the minor road and A817, and recreational users of the Three Lochs Way. The line is better integrated in the west, with some skylining and stacking occurring in the east, however when moving through the Glen Fruin the parallel overhead lines form a key focal feature in transient views.	
Overall assessment of visual impact (L/M/H/VH)	**High**

AT / U / V Leaderfoot Valley

Designated area	Eildon & Leaderfoot NSA	Route/section code	AT / U / V	Infrastructure	One OHL within NSA – 132kV Twin heavy duty wood pole & steel lattice Two OHLs outside NSA - L4 132kV Steel Lattice Towers
Length of sections	AT - 8 km U - 8 km V - 6 km	Survey team	DW/AB	Survey date	16/04/2015

Landscape and visual context

Three overhead lines have been considered in the assessment of the Eildon & Leaderfoot NSA, one section of 132kV overhead line crosses the valley of the Leader Water in the north of the National Scenic Area (NSA) carried predominantly on twin heavy duty wood poles, with steel lattice angle towers. A further two steel lattice 132kV overhead lines are located in proximity to the NSA, running parallel with the northern (U route) and western (V route) boundaries.

The valley of the Leader Water is contained by deciduous woodland with geometric blocks of coniferous woodland and enclosed farmland creating a relatively intimate scale landscape. The conical shaped landmarks of the Eildon Hills form the key focal point of views within and to the NSA, and offer long distance views of the two lines located outside the NSA boundary.

Baseline Landscape character type(s) and key characteristics

The overhead lines considered pass through a number of different LCTs which contribute to the landscape character of the NSA. The key LCTs associated with each of the overhead line sections are as follows:

The AT and U routes pass through the **Lowland Margin with Hills LCT** within or close to this NSA, the key characteristics of which are as follows:

- *Distinctive topography consisting of conical and dome shaped hill groups and crags rising prominently above more gently rolling landform.*
- *Land cover of pasture and arable fields divided by hedgerows or drystone dykes, with scattered mature broadleaf, coniferous and mixed woodlands.*
- *Well-maintained beech and thorn hedgerows with mature hedgerow trees in lower areas.*
- *Moderately dense settlement of frequent, evenly scattered small villages and farmsteads along minor roads and tracks.*
- *A predominantly large scale open landscape of strong curves, and intermittent distant views over the Tweed lowlands.*

Negative attributes:

- *visual detractors include modem farm buildings, pylon lines, and mineral activity.*

The AT and U routes pass through the **Pastoral Upland Fringe Valley LCT** within or close to this NSA, the key characteristics of which are as follows:

- *Medium scale pastoral valley with flat floor enclosed by upland fringe pastures, often with rough grassland and moorland covered hills above.*
- *Smooth large scale landform modified in places by bluffs and moraine on valley floor, scree slopes or rock outcrops on valley sides.*
- *Narrow, often wooded tributary side valleys.*
- *Broadleaf woodlands and scrub on bluff slopes and scattered trees along river banks, occasional coniferous plantations and shelterbelts on valley sides.*
- *Valley floor pastures enclosed by drystone dykes with occasional hedgerows, interspersed with occasional patches of scrub, coarse grass and rushes.*
- *Scattered villages, farmsteads and mansion houses with policy woodlands.*

Local Characteristics of Lower Leader Water LCA:

- *distinctive twin peaks of Black Hill and White Hill locally prominent in lower valley;*
- *intimate enclosed character created by landform, widespread broadleaf and coniferous woodlands;*
- *A68 Trunk Road prominent along valley floor;*
- *views of Leaderfoot viaduct and road bridge from minor roads.*

AT / U / V Leaderfoot Valley

The AT and U routes pass through the **Undulating Grassland LCT** within or close to this NSA, the key characteristics of which are as follows:

- *Large scale, moderately to steeply sloping and undulating landform incised in places by steep gullies and narrow valleys.*
- *Land cover characterised by improved pastures divided by drystone dykes and scattered small to medium sized coniferous plantations.*
- *Medium density settlement with small villages and farmsteads sited typically in sheltered valleys and on lower slopes.*
- *A simple, uniform landscape of smooth flowing curves, open in character with distant views over adjoining valley types and the Lammermuir and Moorfoot hills.*

Local Characteristics of East Gala LCA:

- *moderately to strongly undulating, with both gentle and steep slopes;*
- *locally prominent medium sized conifer plantations;*
- *locally intrusive pylon lines.*

Negative attributes:

- pylon lines locally prominent.

The AT, U and V routes pass through the **Upland Fringe Valley with Settlements LCT** within or close to this NSA, the key characteristics of which are as follows:

- *Medium to large scale flat bottomed valley, enclosed by undulating upland fringe hills.*
- *Smooth large scale landform modified in places by undulating moraine deposits, steep bluffs and terraces cut by meandering river.*
- *Neat pattern of medium sized arable and pasture fields, divided by hedgerows, often with mature trees.*
- *Mature broadleaf woodlands and shelterbelts prominent along valley floor and lower slopes.*
- *Coniferous woodlands on valley sides contrasting with pastures, often well integrated into landscape.*

The AT, U and V routes pass through the **Grassland with Hills LCT** within or close to this NSA, the key characteristics of which are as follows:

- *Typically steep, cone or dome-shaped hills, frequently of volcanic or igneous rock.*
- *Diverse surrounding landform types, ranging from smooth undulations to strongly elongated ridges and hollows.*
- *Land cover dominated by permanent pasture.*
- *Locally frequent woodland cover.*
- *Low to medium settlement density.*
- *Rich in visual contrasts, with individual hills as dominant focal points of views.*

Local Characteristics of Eildon Hills LCA:

- *prominent triple-coned summits give visual focus;*
- *elongated ridges and hollows give a particularly distinctive 'scarp and vale' topography and localised scale in the east of the area;*
- *more irregular mounds and hollows in the west with small mires and lochans;*
- *enclosure features relatively common - shelterbelts, small woodlands, hedgerow network;*
- *occasional arable fields;*
- *diverse network of minor roads.*

Special qualities of the designated area

Special Qualities of the **Eildon & Leaderfoot NSA** that are evident within the landscape that surrounds these sections of overhead line are:

- *Great landscape diversity within a compact area;*
- *The distinctive triad of the Eildon Hills;*
- *Spectacular views from the hill summits;*
- *A strongly united landscape pattern of lively rhythm and colour;*
- *A richly wooded scene of great variety;*
- *The Tweed, an iconic river of international renown;*
- *A rich array of historic buildings, structures and estates;*
- *The hub of Border settlement;*
- *A harmonious and varied prospect from unequalled viewpoints;*
- *The historic crossings of Leaderfoot;*
- *Scott's View;*
- *The Wallace Statue.*

Landscape Assessment

AT / U / V Leaderfoot Valley

Susceptibility							
	Landform	Land cover	Scale	Skylines	Landmarks	Vertical infrastr.	Perceptual
L/M/H/VH	H	M	H	H	VH	H	M

Value					
	Special qualities	Scenic qualities	Landscape quality	Conservation	Recreation
L/M/H/VH	H	VH	H	H	H

Summary of landscape impacts	L	M	H	VH	Comments
Susceptibility		M			Due to the relatively diminutive vertical scale of the AT route infrastructure, the wood pole and steel lattice towers are generally well accommodated within the settled farmland landscape through which it passes. Visibility of the infrastructure is limited to the immediate surrounding landscape often appearing in scale with other landscape features including field boundary trees, small coniferous plantations and high hedgerows. The line rarely interrupts views to the focal Eildon Hills or the enclosing skylines from locations within the NSA. Although outside the NSA, the U route and V route infrastructure interrupt the skylines which enclose the NSA, and form key vertical features in the transition into the NSA from the north and south-west. The scale of the pylons often diminish other landscape features such as field boundary trees and hedges of the farmland landscape within which they are located.
Value			H		Many of the Special Qualities of the area are exhibited within the landscape which surrounds the AT route infrastructure, where it passes close to Black Hill. The NSA offers many opportunities for recreation and tourism, with points of natural and cultural heritage interest found across the NSA, in some instances in close proximity to the overhead lines. The Southern Upland Way passes beneath the AT and U routes, and NCR84 and a number of Core Paths pass close to the V route from which receptors experience the scenic qualities of the NSA. The pylons of AT and V route are often viewed in combination with the trio of Eildon Hills, however the Scott's View and Wallace Statue which are Special Qualities of the NSA are unaffected by the presence of the existing overhead lines.
Scale of the impact on the landscape		M			The pylons detract from some of the key characteristics of the area, including the strong sense of place which is displayed across this small and intimate NSA. The AT route infrastructure is relatively well integrated into scale of the surrounding landscape, however its presence often feels out of place in the quaint farmland landscape and the wooded Leader Water Valley through which it passes. Although located outside the NSA, U and V route detract from the sense of place which extends beyond the boundaries of the NSA, located as they are in the landscapes which form the setting to the NSA, including the enclosing skylines to the north and west.
Geographical extent of the impact on the landscape		M			Impacts are relatively localised to the landscape through which the three overhead lines pass, either within or just outside the NSA. Due to the relative small vertical scale of the AT route infrastructure the geographical extent of its impact on the landscape is relatively limited. The U and V route infrastructure, being a greater in vertical height results in a wider geographical extent to landscape impacts, extending into the NSA at its northern and western extents respectively.

AT / U / V Leaderfoot Valley

Importance of the impact on the landscape		**M**			**Landscape impacts are notable locally, however the Special Qualities of this small and intimate NSA are strongly exhibited across much of the landscape affected by the overhead lines. Although relatively small in scale, AT route forms a key feature in the local landscape through which it passes as the only vertical infrastructure within this small scale and often intimate farmland and valley landscape. Although out with the extents of the NSA, U and V route are located in the surrounding landscapes which form the setting to the NSA, evident when approaching and leaving the designated landscape and detracting from the sense of place and scenic qualities for which the NSA is renowned. Impacts are relatively localised to the landscapes in close proximity to the overhead lines, but extend into the landscapes of the NSA in the case of the U and V routes.**

Summary description of landscape impacts

The low vertical scale of the heavy duty wood pole and steel lattice angle tower infrastructure of the AT line, which crosses the Leader Water valley within the north of the NSA, is generally well contained within the intimate farmland and valley landscape through which it passes, rarely appearing larger in vertical scale than the . The larger steel lattice towers of the U route and V route overhead lines have a greater influence on the surrounding landscape, including areas within the NSA. The towers of V route which pass close to the western boundary of the NSA form a key vertical feature in views from the Eildon Hills landscape character area and alter the setting of this part of the NSA, to some extent diminishing the setting and scale of the hills in views into the this area of the NSA landscape.

Overall assessment of landscape impact (L/M/H/VH)	**Moderate**

(See visual assessment on next page)

Key Issues

- The AT route infrastructure is the only overhead line located within the NSA, and therefore its presence is somewhat of an anomaly within this landscape. Although the overhead line is relative small in vertical scale, it forms a feature in views when entering and leaving the NSA via the A68 along the Leader Water Valley and forms a linear feature through the settled farmland landscape at the northern extent of the NSA.
- The steel lattice angle towers, although relatively limited in vertical scale often appear more apparent in views than those of the twin heavy duty wood poles, and they can occasionally be mistaken for telecommunications masts when seen from a longer distance, where the wood poles are backclothed which reduces their perceptibility.
- The overhead lines of U and V route, located outside the boundaries of the NSA, are larger in vertical scale, crossing relatively open ground to the north and west of the NSA. As a result the towers often appear perceptible over greater distances, especially in the case of the overhead line to the west of the B6359 which is apparent in views from the summits and footpaths across the Eildon Hills.

Potential mitigation opportunities

- Undergrounding of the AT transmission line within, and out with to the east and west, of the NSA to remove impacts in the northern extent of the NSA, including views from Black Hill to the north which offers a vantage across the Leader Valley and wider NSA ;
- Re-routeing of AT transmission line out with the NSA to the north, in order to avoid visual impacts on key visual receptors on the A68, as well as recreational users and tourists, and residential receptors within the Leader Water Valley;
- Removal, through undergrounding or routeing, of the V route and/or U route infrastructure located out with the NSA, to avoid impacts on the setting and visual experience when entering and leaving the NSA;
- Landscape enhancement or management of the existing landscape in proximity to the overhead lines to reduce their visual impact on key views and features within the NSA, and its surrounding setting.

AT / U / V Leaderfoot Valley

Visual Assessment

VP No.	Receptors	Grid ref.	Description (inc. distance to line)	Value of view		Scale of impact (inc. distance to line)		Frequency	Imp. of impact
1	Road users travelling on the A68	357309, 636324	A68 near Packman's Bridge. Close proximity to overhead line as it crosses the road ascending from the foot of the Leader Valley.	Experienced my many receptors visiting the NSA by motor vehicle, albeit that views are relatively contained along the route corridor and receptors are travelling at speed.	M	The overhead line is almost imperceptible from the A68 until receptors are in close proximity to the line as it crosses perpendicular to the road. Visibility is limited to the overhead cables and perpendicular views along the line when directly beneath it.	L	Similar views possible when travelling north out of the NSA, limited to a short section of the A68 with views of the overhead line often screened by roadside vegetation and trees.	L
2	Recreational users/ walkers	358536, 636946	Summit of Black Hill and site of a historic hill fort approximately 1km north of the overhead line and offering views across the Leader Water Valley to the iconic Eildon Hills.	Offers an elevated vantage across much of the NSA towards the focal point of the Eildon Hills, whilst echoing their shape and character.	H	Elevated views from this local hill summit which offers open panoramic views across wooded Leader Valley and the majority of the NSA beyond, are unaffected by the scale of the line which crosses the farmland landscape below.	L	Similar views available when approaching the hill from the south-east, and from the nearby White Hill albeit it a greater distance.	L
3	Minor road users, nearby residential properties and walkers/ cyclists	358439, 635872	Located on B6356 minor road close to the scattered settlement of Redpath. Overhead line is located approximately 100m from the viewpoint.	View of limited scenic value, but also represents views of residential receptors who value the local landscape.	M	Extensive views of the overhead line are limited by the presence of dense deciduous hedgerows which form the field boundaries through which the line passes. The wood poles are generally well sited close to field boundaries and adjacent trees, however the steel lattice angle towers often appear more perceptible and out of place within the farmland landscape.	M	Similar views possible from the network of minor roads, farm tracks and footpaths which dissect the farmland landscape, however views are often filtered or screened by deciduous hedgerows.	M

AT / U / V Leaderfoot Valley									
4	Recreational users/ walkers	357905, 636019	Located on Core Path which follows the western bank of the Leader Water. The overhead line crosses the river at this point and a wayleave in the tree exists creating a brief opening up of views from the footpath along the line to the west and east.	Views within the Leader Valley are generally contained by deciduous woodland along the course of the river as it cuts through this intimate small scale landscape.	M	The overhead line appears out of place in the foot of the intimate valley as it crosses the Leader Water via a narrow wayleave through the deciduous woodland. A steel lattice angle tower is located very close to the footpath on the west side of the river, and although relatively	M	Similar views of the line are limited due to the densely wooded nature of the river corridor, however the network of footpaths and farm tracks within the Leader Valley offer similar, albeit often filtered and glimpsed views of the overhead line.	M
5	Recreational users/ walkers	353586, 636091	Located on route of Southern Upland Way to the north of the NSA as it passes beneath the AT route.	Experienced by users of the Southern Upland Way and offering views across the NSA towards the focal point of the Eildon Hills.	M	The route passes directly beneath the AT route just to the north of the overhead line before the footpath descends into the NSA and Tweed Valley. The route of the footpath is generally wooded north of the overhead line, however as the line crosses a wayleave allows views east and west along the line for a short section where the steel lattice towers and wood poles appear large in scale in close proximity to receptors.	M	Similar views are possible from short sections of local footpaths, minor roads and farm tracks which cross the farmland landscape north of the NSA, however views are often filtered by the presence of deciduous field boundary trees and hedgerows. Views of the U route are also possible when approaching the NSA from the north.	M
6	Recreational users/ walkers and anglers	353897, 631584	Access track to Eildon Hills, roadside parking alongside B6359 for angling lake, and route of NCR84 and Core Path. Approximately 500m from overhead line.	Experienced by many visitors to the Eildon Hills and a key access point. Focus of views is generally east from the road across the NSA.	M	AT and U route imperceptible from this location. V route forms a key linear vertical feature to the west of the B6359 out with the boundary of the NSA. The towers appear large in scale as they	M	Similar views possible from the angling lake and route of the NCR84 which follows the B6359 along the	M

AT / U / V Leaderfoot Valley

						cross relatively high ground to the south of the Tweed Valley. Towers don't affect views towards the Eildon Hills.		western boundary of the NSA.	
7	Recreational users/ walkers	355457, 632870	Summit of Eildon Hill North. Approximately 2.5km from the V route.	Documented viewpoint and key location in special qualities of NSA	H	Towers of AT route almost imperceptible to the north at over 3km, however lighter coloured steel lattice towers visible when backclothed against underlying landscape. V and U route perceptible at this distance, but very limited impact on the available views from this location.	L	Similar views possible from nearby footpaths to hill summit and route of Southern Upland Way on north-west facing slopes and the route of the St Cuthbert's Way which passes between the hills.	L
8	Recreational users/ walkers	354817, 632279	Summit of Eildon Mid Hill. Approximately 1.6km from the nearest point of the V route.	Documented viewpoint and key location in special qualities of NSA. Visibility of wind farms to the north, east and south is a key feature of the panoramic views available from this location.	H	AT and U route are almost imperceptible at this distance, however the lighter coloured steel lattice towers of AT are visible when backclothed against underlying landscape. The steel lattice towers of V route are clearly visible in views from this summit, appearing skylined to the W/NW in views towards the Moorfoot Hills which is otherwise largely unaffected by vertical built development.	M	Similar views available from footpaths accessing hill summit from the west.	M
9	Road users and pedestrians on the A6091	352266, 634381	Route of A6091 representing views towards the Eildon Hills experienced when approaching the NSA, and close to the terminal tower of the V route close to Melrose.	Represents first available view of iconic Eildon Hills from the A6091.	M	Terminal tower appears large in scale and skylined in views towards the Eildon Hills which form the distinctive skyline to the SE beyond. In close proximity to south side of road and pedestrian	M	First available, albeit fleeting views of the iconic and distinguishable Eildon Hills when approaching the NSA.	M

AT / U / V Leaderfoot Valley

						footpath, appearing out of scale with adjacent landscape features.			

Visual impacts from transient routes

Sequential views of one or more of the three overhead lines considered in the assessment are possible from a number of transient routes within and just out with the NSA. As described above, views of the AT and U routes are possible from a short section of the Southern Upland Way north of the NSA boundary. Views from other long distance footpaths such as the St Cuthbert's Way and Borders Abbey Way are limited, with the AT, and V route although occasionally perceptible, generally appearing at a distance of beyond 3km and backclothed against the underlying landscape. Views of V route are possible from a relatively long section of the NCR84 as it follows the B6359 along the western boundary of the NSA, however receptors will generally be focussed on views towards the Eildon Hills and the wider NSA to the east.

When approaching the NSA via motor vehicle, fleeting views of the AT route within the Leader Water Valley and the V route adjacent to the A6091 when approaching the NSA, and in the case of the latter, the terminal tower forms a key feature in the first available views towards the iconic Eildon Hills.

Summary description of visual impacts

Views of the overhead lines within and in close proximity to the NSA are generally limited to those experienced from routes and locations at the periphery of the NSA. No or very limited visibility of the overhead lines is possible from key locations listed in the NSA Special Qualities such as Scott's View or the Wallace Statue. Views from long distance footpaths such as the Southern Upland Way to the north of the NSA and the St Cuthbert's Way and Borders Abbey Way are limited to short sections or views experienced at some distance. Views are possible of the AT route from the network of Core Paths which cross the northern area of the NSA. The A68 runs perpendicular to the overhead line west of the Leader Water, from where glimpsed views of the line are possible as it crosses the valley. Longer distance views of the lines outside the NSA are possible from the summits of the Eildon Hills, where the lines often appear as minor elements in the view, however from the key summits within the Eildon Hills the towers of V route west of the NSA appear skylined above the underlying farmland landscape and interrupt views towards the Moorfoot Hills which are otherwise unaffected by vertical built development.

Overall assessment of visual impact (L/M/H/VH)	**Moderate**

Appendix 3

Stage 1 – Summary of Stakeholder Engagement

Changing the VIEW

Phase 1 Consultation Report

Introduction

1.1 The purpose of the report is to summarise the initial consultation comments and responses gathered from Stakeholders in relation to existing electricity transmission lines and associated transmission infrastructure in the ownership of SP Energy Networks (SPEN) within the Loch Lomond & The Trossachs National Park (LLTNP), Loch Lomond NSA, and the Eildon and Leaderfoot National Scenic Area (NSA), in Scotland.

1.2 A range of different Stakeholders were approached by SPEN in early 2015 to seek their potential involvement and contribution to the SPEN Changing the Visual Impact of Existing Wirescape (VIEW) Project.

1.3 Three initial stakeholder consultation workshops have been held to date:

- Stakeholder Workshop - Friday, 15th May 2015;
- Loch Lomond & The Trossachs National Park Stakeholder Workshop - Friday, 12th June 2015;
- Eildon & Leaderfoot National Scenic Area Stakeholder Workshop – Wednesday, 23rd September 2015;

1.4 A summary of comments, issues and ideas discussed at the stakeholder consultation workshops are provided in the accompanying Workshop/Meeting Summaries which follow.

Initial Reactions to the Changing the View Project

1.5 The reactions of the invited Stakeholders were overwhelmingly positive to this exciting project. The following comments are just a selection of some of the positive reactions received:

- Focus on an **"Aspirational"** and **"Innovative Approach"**
- ***"What are SPENs aspirations for the project and its objectives?"***
- An exciting opportunity to ***"Add Value"*** and ***"Enhance"*** these valuable landscapes;
- Complex – ***"Important landscapes, landowners, visitors and the visual experience"***
- Scale of potential projects – ***"large scale benefiting a large number of people?"***
- How can stakeholders contribute to ***"Delivering a legacy"?***
- Learning from other projects in the National Park – ***"Scenic Routes Initiative"***
- An exciting opportunity for stakeholders to ***"work with SPEN collaboratively in a positive way"*** to ***"deliver the same objectives"***
- ***"Enthusiasm and positivity of members"*** to form an ***"A united front"*** – SPEN and the Stakeholder Partnership Group.

Key Issues / Discussion Points arising

1.6 The Stakeholder Workshops covered a wide range of issues and discussion points. The following key issues were identified as reoccurring themes of discussion:

- Compatibility with ongoing existing projects and initiatives;
- Considering the Cultural and Historic environment;
- Consideration of visitor numbers and other transient users passing through the NP;
- Lessons to be learnt from other transmission infrastructure projects ;
- Knock on impacts – relationships with landowners, conservation, natural heritage, recreation;
- Consideration of public/private land require different approach (i.e. Farm Estate Plans);
- Maintenance – long term commitment from Stakeholders and/or SPEN;
- The need to ensure joined up thinking and approach with all relevant Stakeholders and users;
- Identifying opportunities for innovation and new thinking;
- Managing expectations and aspirations of Stakeholders;
- What are feasible outcomes of the VIEW Project?

Approach to Mitigation Proposals/Projects

1.7 The diagram below summarises some of the key ideas and topics discussed in relation to potential mitigation proposals and projects.

What is required from Stakeholders?

1.8 SPEN wishes to formally recognise Stakeholders as members of the **Stakeholder Partnership Group (SPG)**, in order to establish an ongoing commitment and collaboration in the project. Stakeholders who have attended the initial workshops will be invited to join the SPG and the final membership will be formalised with the publication of SPEN's Approach Document (*Changing the View - Reducing the visual impact of existing electricity transmission infrastructure in Scotland's National Parks & National Scenic Areas* (2015) SPEN).

1.9 The Changing the VIEW Project will require ongoing collaboration, input and support from the Stakeholder Partnership Group:

- Ongoing **dialogue** and **engagement** in the process;
- Specific local **knowledge, experience** and **information**;
  - Other projects/initiatives ongoing in the National Park & NSAs;
  - Potential conflicts/issues arising in the National Park & NSAs;
  - Key aims and objectives for protection, conservation and enhancement of the National Park & NSAs.
- To **liaise** with other groups, users, landowners when necessary and facilitate ongoing dialogue;
- Assistance in the identification of **potential receptors** and **effects**;
- Assistance in the identification of **mitigation projects** / **proposals**;
- Project/proposal **ownership** once delivered; and
- Potential **maintenance commitments**.

Next Steps for the Changing the VIEW Project

1.10 The second phase of the Changing the VIEW Project will focus on the desk and field based assessment and reporting of the visual effects associated with the existing transmission infrastructure within the Loch Lomond and The Trossachs National Park and the Eildon & Leaderfoot National Scenic Area (NSA).

1.11 The following key tasks will be undertaken over the coming months:

- Ongoing discussions with relevant members of the Stakeholder Partnership Group (SPG) in relation to the identification of potential receptors and effects;
- Finalise the methodology for the assessment of landscape and visual effects – *Method* Statement (June - July 2015), including liaison with specific Stakeholders with experience of Landscape and Visual Impact Assessment (LVIA);
- Begin desk and field based assessment (July - August 2015);
- Analysis and reporting (Autumn 2015);
- Further consultation with Stakeholder Partnership Group (SPG) (ongoing);
- Decisions as to projects to go forwards for detailed development – inc. engineering and environmental feasibility (late 2015).

Meeting Agenda

SPEN VIEW Project
Stakeholder Partnership Group Meeting, No 1

Date and time	**Friday, 15th May, 10:30am - 3.30pm**
Location	Grand Central Hotel, Central Station, Gordon Street, Glasgow, G1 3SF http://grand-central-glasgow.hotel-rn.com/location.htm

Name	Organisation	Email	Att.	Dist.
Mike Shepard	SNH		•	•
Carlos Clarke	Scottish Borders Council		•	•
Siobhan McDermott	Scottish Borders Council		•	•
Sara Melville	Loch Lomond & The Trossachs National Park		•	•
John Low	John Muir Trust		•	•
Sheila Wren	John Muir Trust		•	•
Ross Anderson	Scottish Campaign for National Parks		•	•
Adele Shaw	Historic Scotland		•	•
James Fraser	Friends of LLTNP		•	•
Tom Wallace	LLTNP Community Partnership		•	•
Natalie Stevenson	LLTNP Countryside Trust		•	•
Alice Blazy-Winning	Friends of LLTNP		•	•
Cathy Cacace	Scottish Government		•	•
Frances Pacitti	Scottish Government		•	•
John Thomson	SCNP/As for Protection of Rural Scot		•	•
Richard Baldwin	SHETL		•	•
Grant Douglas	SPEN	gdouglas@spenergynetworks.co.uk	•	•
Cathy Hill	SPEN		•	•
Ross Baxter	SPEN		•	•
Alan Kerr	SPEN		•	•
Eric Leavy	SPEN		•	•
Alan Kelly	SPEN		•	•
Sam Oxley	LUC	sam.oxley@landuse.co.uk	•	•
Dan Walker	LUC	dan.walker@landuse.co.uk	•	•
Alex Burton	LUC	alex.burton@landuse.co.uk	•	•

1 Arrive 10.30am for tea and coffee (10.30am – 10.45am)

2 Introductions (10:45am – 11:00 am)

- SPEN (attendees TBC)
- Stakeholder Partnership Group (SPG) (attendees TBC)
- LUC (attendees TBC)

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Meeting Agenda

SPEN VIEW Project
Stakeholder Partnership Group Meeting, No 1

3 Overview and Introduction from SPEN (11:00am – 11:15am)

- Roles, responsibilities and acronyms (who are OFGEM, SPEN, SHETL, NG etc.)
- What is the VIEW Project? (Introduction to background and OFGEM fund, purpose etc.)
- What do we need from stakeholders?
- How the process will work? (Importance and method of contributions to project and opportunities to comment at key stages)

4 Overview of the View Project (11:15am – 11:45am)

- 15 minute PowerPoint Presentation lead by LUC, walking through main headings in Policy Document
  - *Provide A0 plans of designated landscapes and infrastructure to provide context to the SPG members, to be placed on tables or pinned to walls*
- Questions and reactions from SPG members

5 Outline of LUC Methodology for VIEW (11:45am – 12 noon)

- 10 minute overview of methodology, to be lead by LUC
  - *Draft method statement – to be circulated prior to meeting for comments*
  - *Draft field survey sheet – to be circulated prior to meeting for comments*
- Questions and reactions from SPG members

6 Break (12:00am – 12:15am)

7 Group Discussions / Brainstorming and Ideas Session (12.15 – 1.15pm)

- SPG members spilt into small groups and rotate around the room (3/4 people, with a representative from SPEN and/LUC in each group) to discuss the following: *(questionnaire to be prepared in advance by LUC/SPEN) (need flip charts, post-it notes, pens)*

  1) <u>THE PROTECTED LANDSCAPES – LOCH LOMOND & TROSSACHS AND EILDON HILLS</u>
     - What is especially valued about these landscapes?
     - By whom?
     - Where do people go? Where are the honeypot areas?
     - What do people do in these areas?

  2) <u>PERCEPTION OF EXISTING GRID INFRASTRUCTURE</u>
     - How do you/people perceive the existing grid infrastructure in these protected landscapes?
     - Do you see the grid infrastructure as a problem in any particular areas?
     - Where do you think the infrastructure should be looked at?
     - Why?

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Meeting Agenda

SPEN VIEW Project
Stakeholder Partnership Group Meeting, No 1

3) POTENTIAL MITIGATION
   - What mitigation may be appropriate?
   - What mitigation may be successful?
   - What mitigation may represent 'best value'? (Not limited to removal/relocation of grid
   - infrastructure but wider landscape improvements – screen planting, green network
   - improvements etc.)

4) METHODOLOGY
   - Which viewpoints/locations would you suggest should be visited during field work?
   - Do you have any comments you would like to make regarding the methodology/field survey form? *(to be circulated in advance of the meeting)*

8 Lunch (1.15pm – 2.00pm)

9 Open discussion regarding mitigation options and priorities (2.00pm – 2.30pm)

- Feedback and collation of thoughts from group discussion before lunch on mitigation
- Discussion about types of mitigation can be considered?
  - Planting, green networks and access, habitats, interpretation, enhancement, re-routeing, change in infrastructure type, undergrounding.
  - Discuss relative merits and disadvantages of each *(flip chart brainstorm of group lead by chair)*

10 Next Steps for the VIEW Project (2.30pm – 3.00pm)

- Set out the programme for the VIEW Project
  - Feedback from today – finalise documentation and approach
  - Field work
  - Reporting and analysis
  - Stakeholder engagement
  - Project selection
  - Feasibility, detailing and implementation
- Date of next stakeholder meeting?

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Meeting Agenda

SPEN VIEW Project
Stakeholder Partnership Group Meeting, No 1

11 Questions & Answers (3.00pm – 3.30pm END)

- Any other questions or queries from SPG to SPEN/LUC
- Sign up for SPG members – declaration/commitment of stakeholders to the VIEW Project.

Notes of comments and actions to be taken by SPEN representative and circulated following the event.

Please provide your feedback and responses to gdouglas@spenergynetworks.co.uk, and dan.walker@landuse.co.uk, or write to addresses below.

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SPEN VIEW Project: Stakeholder Questionnaire

Name	Organisation	Email Address

WHERE & WHO? The Nationally Designated Landscapes - Loch Lomond & The Trossachs National Park, Loch Lomond NSA and Eildon & Leaderfoot NSA
What is especially valued about these landscapes? & by whom?
Where do people go? Where are the honeypot areas?
What do people do in these areas?
WHAT? Perception of Existing Transmission Infrastructure
How do you/people perceive the existing grid infrastructure in these protected landscapes?
Do you see the grid infrastructure as a problem in any particular areas?
Where do you think the infrastructure should be looked at? & Why?

HOW? Potential Mitigation
What mitigation may be appropriate?
What mitigation may be successful?
What mitigation may represent 'best value'? (Not limited to removal/relocation of grid infrastructure but wider landscape improvements – screen planting, green networks etc.)
HOW? Method Statement / Proposed Approach
Which viewpoints/locations do you suggest should be visited during field work?
Do you have any comments regarding the draft method statement?
Any other comments/questions….

First Stakeholder Workshop Summary

Grand Central Hotel, Central Station, Gordon Street, Glasgow - Friday, 15th May 2015

Stakeholder Contacts				
Stakeholder Organisation	**Stakeholder Representative**	**Email**	**Att.**	**Dist.**
SNH	Mike Sheperd	mike.shepherd@snh.gov.uk	•	
SNH	Jo Duncan	joanna.duncan@snh.gov.uk	•	
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Scottish Borders Council	Siobhan McDermott	smcdermott@scotborders.gov.uk	•	
Loch Lomond & The Trossachs National Park	Sara Melville	sara.melville@lochlomond-trossachs.org	•	
John Muir Trust	John Low	john.low@jmt.org	•	
John Muir Trust	Sheila Wren	sheila.wren@jmt.org		•
Scottish Campaign for National Parks	Ross Anderson	admin@eastlochhead.co.uk	•	
Historic Scotland	Adele Shaw	adele.shaw@scotland.gsi.gov.uk	•	
Friends of LLTNP	James Fraser	jamesbfraser@aol.com	•	
LLTNP Community Partnership	Tom Wallace	tom.wallace@lochlomond-trossachs.org	•	
LLTNP Countryside Trust	Natalie Stevenson	natalie.stevenson@lochlomond-trossachs.org	•	
Friends of LLTNP	Alice Blazy-Winning	falice@lochlomond-trossachs.org		•
Scottish Government	Cathy Cacace	catherine.cacace@scotland.gsi.gov.uk	•	
Scottish Government	Marian McSeveney	marianmcseveney@scotland.gsi.gov.uk	•	
Scottish Government	Frances Pacitti	frances.pacitti@scotland.gsi.gov.uk		•
SCNP/As for Protection of Rural Scot	John Thomson	thomsonhughes@btinternet.comTable		•
SHETL	Richard Baldwin	richard.baldwin@sse.com	•	
SPEN	Grant Douglas	gdouglas@spenergynetworks.co.uk	•	
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Key Discussion Points

- Loch Lomond and The Trossachs National Park the No.1 countryside destination in Scotland with over four million visitors a year (http://www.nationalparks.gov.uk/learningabout/whatisanationalpark/factsandfigures)
- Opportunities for innovation and 'thinking outside the box'
- Projects offers opportunities for potential 'Added value' to the special qualities and objectives of the National Park and National Scenic Areas (NSAs)
- Complexity of issues with
  - visitors,
  - landscapes
  - visual experience
- Scale of project - large scale - large number of groups/people, but not limited to any scale at this stage
- Cultural/ historic environment – local knowledge
- Enhancement of qualities
- Good starting point
- Aspirational project
- Limitation of mapping/ routes/ corridors
- Recreational Routes and Trails through National Park (i.e. Great Glen Way, Rob

Mitigation Discussion Points

- Land management team:
  - Land owners
  - Knock on effects
  - Planting/ Deer numbers
- Public/private landowners – differing approach
- Key landowners – small number
- Landowners
  - Small in number
  - Difficult to establish a relationship
  - Ideally to work a as a collective
- Maintenance - long term /commitment
- Connected collaborative approach
- Local access groups
- Scottish Landowners & Estates
- 'Disguise, Distract or Enhance'
- Business case – accessing funding
- Visitor/tourist numbers
- Appropriate mitigation in appropriate places
- Enhancing those special qualities of National Park and/or National Scenic Areas (NSAs)

Other initiatives/projects

- Farm estate plans – National Park liaising with large private land owners/estates to develop plans which seek to deliver National Park objectives
- Biodiversity initiatives
- Wild Park 2020- protected/invasive species and potential implications
- National Park Relative Wildness Study
- Glen Gyle – upgrading tracks, other projects
- Great Trossachs Forest – Lock Achray
- 'Fairy Capital of Scotland'
- Scottish Government Scenic Routes Initiative/Competition
- Forestry design process – lessons to be learnt
- Learn from other projects – scenic routes initiative
- Mitigation – Beauly Denny OHL Perthshire and Stirlingshire
- Loch Sloy Dam Walk and Viewpoint
- Habitat Network initiatives
- Transport Scotland improvements to A82 between Drovers Arms and Tarbert
- The Helix Project (Kelpies)
- Proposed cycle route from Oban to St Andrews

First Stakeholder Workshop Summary

Grand Central Hotel, Central Station, Gordon Street, Glasgow - Friday, 15th May 2015

Key Discussion Points	Mitigation Discussion Points	Other initiatives/projects
Roy WAY, John Muir Way, National Cycle Network) • Scale of visitor numbers • Rail users/ road users • Enthusiasm and positivity of members • Delivering a legacy • A united front between Stakeholders • Other initiatives • Joining up the dots/ joined up thinking • Alternatives – hard engineering/landscaping mitigation measures may lead to additional impacts • Biodiversity and ecological considerations – i.e. problems with non-native species • Conflict with opening up views and screening visibility of existing infrastructure (i.e. views from A82 along western shore of Loch Lomond	• Maintenance issues • Ofgem Fund: o Maintenance/ long term care – legacy o Ongoing funds/ security of funds/ responsibility • Distance from existing infrastructure • Equating existing receptors • Criteria balance - 'Pounds per person' • Perceptions study – perceptions likely to vary greatly **Hard engineering** o Expensive o Questionable added benefit ***Undergrounding*** o Unlikely to be a viable solution o Associated impacts with access infrastructure o Problems with moorland o Problems with peat o Possible solution for lines near Sloy Switching Station ***New 'T' pylon*** o Single monopole structure o Greater infrastructure beneath the ground - problems with peat and difficult ground conditions • Recognition of added benefit in the balance • Different infrastructure • Sealing compounds - permeability of infrastructure • New ideas/ innovate – pylon design • Steel lattice tower o preforms well in long-distance views 'visual absorption into the landscape' o reduces the in perceptibility over distance • Public consultation on mitigation measures will be very important • Community engagement to understand local issues • Need for a balanced approach • Landscape reinforcement • Re-routing o associated impacts o balancing the comparative impacts against the existing impacts • Delivery/ feasibility • Programme/timescale • Ambition/realism - expectations • Rationalisation of options coming forward • 'Bang for your buck' • Sensitivities with landowners • Mitigation planting o in absence of rerouting/ realigning o conflict with other initiatives e.g. views from railways/ roads • Public perception • New/ changing features in the process of mitigation may increase the perception of the existing infrastructure • Communities – initiatives • Different materials o mitigation/ design principals o constraints • Substation opportunities o negotiating red tape and health and safety restrictions/constraints to design	• Proposed Three Saints Way Cycle Route

First Stakeholder Workshop Summary

Grand Central Hotel, Central Station, Gordon Street, Glasgow - Friday, 15th May 2015

Key Discussion Points	Mitigation Discussion Points	Other initiatives / projects
	• Transition from urban edge to rural heart of National Park • Technical constraints – provide stakeholders with an understanding of why/how thing are done in a certain way. • Site specific improvements	

Existing 'Honey Pot' Areas / Key Locations (identified during group workshop exercises)		
Loch Sloy Dam - Walk and Viewpoint	Ben Glas	Kyber Pass
Gartmore	Ben Oss	Great Trossachs Way
Helensburgh	Ben Vane	West Highland Way
Drymen	Ben Narnain	Three Lochs Way
Ardlui	Glen Gyle	John Muir Way
Killin	Loch Katrine	Clyde sea lochs trail
Ben Lomond	Rob Roy Way	West Highland Rail Line
Ben More		

Potential Additional Stakeholder Contacts

Stakeholder Organisation	Stakeholder Representative	Email
Argyll and Bute Local Access Forum/ Helensburgh and District Access Trust	John Urquhart	john@balmillig.co.uk
Director, Ramblers Scotland at The Ramblers	Jess Dolan / Helen Todd	scotland@ramblers.org.uk
Scottish Wild Land Group/ National Trust Scotland	Beryl Leatherhead	admin@swlg.org.uk.
Archaeology Scotland	Jonathan Wordsworth	j.wordsworth@archaeologyscotland.org.uk
Scottish Natural Heritage (SNH)	Frazer McNaughton Deborah Sandals	frazer.mcnaughton@snh.gov.uk deborah.sandals@snh.gov.uk
Development Officer for The Great Trossachs Forest	Sue Morris	suemorris@scottishforestalliance.org.uk
Forestry Commission Scotland (FCS)	John Hair	john.hair@forestry.gsi.gov.uk
Scottish Water	Allan Fail	allan.fail@scottishwater.co.uk
Eildon & Leaderfoot Hills NSA • Local Conservation/Interest Groups • Ramblers and user groups associated with Southern Upland Way long distance footpath		

Loch Lomond & The Trossachs National Park Workshop Summary

Loch Lomond & The Trossachs National Park Authority Headquarters, Balloch - Friday, 12th June 2015

Stakeholder Contacts				
Stakeholder Organisation	**Stakeholder Representative**	**Email**	**Att.**	**Dist.**
Loch Lomond & The Trossachs National Park Authority	Sara Melville, Landscape Advisor (Conservation Team)	sara.melville@lochlomond-trossachs.org	•	
Loch Lomond & The Trossachs National Park Authority	Gordon Forrester, Strategic Routes Co-ordinator (Tourism Team)	gordon.forrester@lochlomond-trossachs.org	•	
Loch Lomond & The Trossachs Countryside Trust	Natalie Stevenson, Countryside Trust Manager	natalie.stevenson@lochlomond-trossachs.org	•	
Loch Lomond & The Trossachs National Park Authority	Dermot Smyth , Countryside Management Officer (Architect, Estates Team)	dermot.smyth@lochlomond-trossachs.org		•
Loch Lomond & The Trossachs National Park Authority	Kenny Auld, Access Adviser	kenny.auld@lochlomond-trossachs.org	•	
Loch Lomond & The Trossachs National Park Authority	Sue Laverge, Enforcement Officer	sue.laverge@lochlomond-trossachs.org	•	
Loch Lomond & The Trossachs National Park Authority	Alan Bell, Conservation Manager	alan.bell@lochlomond-trossachs.org	•	
Loch Lomond & The Trossachs National Park Authority	Fiona Stewart, Natural Heritage Planner (Conservation Team)	fiona.stewart@lochlomond-trossachs.org	•	
Loch Lomond & The Trossachs National Park Authority	Simon Franks, Trees and Woodlands Adviser (Land-use Team)	simon.franks@lochlomond-trossachs.org		•
Loch Lomond & The Trossachs National Park Authority	Emma Weinmann, Land Management Adviser (Land-Use Team)	emma.weinmann@lochlomond-trossachs.org		•

Line Section	Relevant Issues/Features	Other initiatives/projects in area	Additional Stakeholder Contacts

Glen Fruin	• Consideration of minor wood pole lines/distribution network - £500m Ofgem fund only available to mitigate impacts associated with transmission infrastructure (132/275/400kV – "trunk routes").
	• Wind farm proposal adjacent to south of National Park (south of Glen Fruin)
	  o Cumulative visual impact of wind farm and transmission infrastructure from various local routes
	• 3 lochs way permanent track/ temporary track – upgrade works being undertaken at present with consultation/correspondence between NP, SPEN, landowners and recreational uses
	  o Track used by locals as an off-road – in the process of making it permanent – possible scope to undertake further improvements
	• Visibility from the road (A817)
	• Ben Bowie – near 132kV (overhead line) offers a good viewpoint looking into the National Park
	• Local recreation asset:
	  o scope to increase it use to the wider park
	  o roads in the area are very popular with cyclists
	• John Muir Way (walkers/cyclists) - Becomes 3 Lochs Way running through Glen Fruin from Balloch to Inveruglas
	  o Gateway feature
	  o Powerlines highly prominent
	• History of pylon design & routing
	• Relationships with land managers, estate owners to be included in a stakeholders – dear management groups possible communication link
	• Some viewpoints e.g. Feorlinbreck to be considered in relation to existing infrastructure
		• Landscape / ecological mitigation measures
		• Land management – at periphery of the park in what is a generally well used, but relative poor value area of the national park
		• Native planting – softening of incongruous coniferous woodland edges & aim to replace (two blocks of coniferous forestry on south side, one large block on north side)
		• Farm Plans – Luss Estates etc. (current National Park Initiative for bigger estates – "match funding" through SRDP – Scottish Regional Development Programme). Incentives for large estates to develop estate/farm scale plans in line with National Park objectives
		• Existing Farm/Estate Plan schemes slow getting off the ground
		• Public "Valency", Innovation
		• Landscape / Land Futures Project (failed initiative – valuable lessons to be learned?)
		• SRDP – Scottish Regional Development Programme
		• Community Futures Initiative (http://www.lochlomond-trossachs.org/living/community-futures/menu-id-200.html)
			• Emma Yendell – (Land Management Advisor - Conservation & Land Use Team) → Deer management group
			• MOD – wildlife contact, access & recreation (Scott Ashworth), estates team
			• Loch Lomond and the Trossachs National Park – Gordon Forrester, Tom Wallace & Natalie Stevenson (community partnership), Claire Travis, Fiona Stewart, Alan Bell, Henry? Old +(recreation & access), Sara Melville
			• Craig Jardine
			• Emma & Harriet – land advisors, landowner forum
			• Dear management groups

Drymen	• National Cycle Network Route 7 – well used by recreational cyclists however road is in relatively poor condition • Visibility of OHL infrastructure from Drymen and local routes at the edge of the National Park • Local footpaths and minor road network used by local communities for recreation • Area interacts with user experience of West Highland Way (http://www.west-highland-way.co.uk/), John Muir Way (http://johnmuirway.org/), Rob Roy Way (http://www.robroyway.com/) • High numbers of visitors in this area – increased visual interaction with the line – 'value for money' • A81 and A811 act as key entrance routes to the National Park from where the existing 275kV is visible	• Initiatives associated with National Cycle Network, West Highland Way, Rob Roy Way • National and local initiatives to increase local user/tourist user numbers of the these recreational routes	• Community Council contacts • West Highland Way and Roby Roy Way user group contacts • Dear management groups

Loch Lomond & The Trossachs National Park Workshop Summary

Loch Lomond & The Trossachs National Park Authority Headquarters, Balloch - Friday, 12th June 2015

Line Section	Relevant Issues/Features	Other initiatives/projects in area	Additional Stakeholder Contacts
Moor Park & Loch Ard Forest	• Large areas of Forestry Commission Land: Wind throw damage to coniferous forestry plantations caused by hurricane, coupled with recent felling has created a disturbed appearance to this corner of the National Park. Intentions to replanting or restricting of forestry could be explored • Well used recreational routes: West Highland Way, Rob Roy Way, National Cycle Network • Area acts as a gateway into the park • Loch Ard Forest reaching harvesting age – forest acts as Sitka factory • Informal user access - area relatively underused for recreation • Flooding around Loch Ard - Aberfoyle • Ducray catchment area of Loch Ard - Reduce peak flood risk/ periods • Eroded blanket bog • Aberfoyle → Stronachlachar – Queen Victoria & historical route – extensive built heritage conservation and heritage trail • Areas now an open landscape • Conic Hill popular with walkers • Way leave highly prominent from Ben Lomond • Way leave/softening/ feathered edges (Simon Franks)	• Landscape scale projects currently ongoing within Loch Ard Forest – potentially interesting projects to tap into • Ecological system services ("Ecosystem services") SEPA – make a more attractive area • Promoted route- aqueduct path concrete channel (runs south of Loch Ard from Loch Katrine to Glasgow) • Potential for a broadleaf woodland initiative along aqueduct route in conjunction with Scottish Water • Area of riparian woodland focused on river corridors - scope to be promoted as natural woodland habitat - water vole reintroduction initiative currently being undertaken • Vistas through the forest • Loch Ard mountain bike/walking route, 45km circular - Undefined circular cycle route with scope for promotion and extension, utilising vast network of forestry and informal tracks through forest • Bruach Glen – safe family cycling, could be promoted more widely and extended • Great Trossachs path network/ project – British Petroleum (BP) provided funding: http://thegreattrossachsforest.co.uk/great-trossachs-path/what-is-the-great-trossachs-path/ • Great Trossachs Forests Trust – 16,000 ha & 8000 ha recovered/restored native woodland	• Forestry Commission: key stakeholder – areas close to 275kV OHL (Military Road/Pipe Track) Katie ??? (Glasgow) • Scottish Water – seek contact • Simon Franks – trees & woodlands (i.e. Glen Ogle, Glen Dochart & Cruach Tairbeirt)

Gleann Gaoithe	• "Art in the Landscape"
	• Views from Ben Lomond - Way leave issue greater than overhead line, but more prominent in the forest to the SE
	• Mary Queen of Scots route (online & book) – access issues/ conflicts http://www.rucsacs.com/routemap/Mary-Queen-of-Scots-Way/?refid=2
	• Golden Eagle activity in the area
	• Views of/from Ben Venue
	• West Highland way may have views of this section
	• Comer Farm, Comer – directly next to OHL – estate is for sale, could the fund buy the land?
	• Relative lack of receptors in the area
	• Abandoned/ruined village with schoolhouse located in Gleann Gaoithe
		• Great Trossachs trust – 33 miles (Loch Lomond - contact?)
		• Jenson Estate
		  o Strath Ard ecosystems project
		  o Peatland restoration
		  o Native woodland cover/ interaction with hydrological interaction interests
		• Planting Plans
		  o RSPB/ Forestry Commission Scotland/ Woodland Trust
		  o BP Fund (corporate responsibility)
		  o Educational element/ volunteering element
		  o Native conservation & landscape access
		• Great Trossachs path network/ project – BP funding http://thegreattrossachsforest.co.uk/great-trossachs-path/what-is-the-great-trossachs-path/
		• Great Trossachs Forests 16,000 ha.
			• Sue Morris – potential Stakeholder contact (Development Officer for The Great Trossachs Forest)
			• Royal Society for the Protection of Birds (RSPB)
			• Scottish water – Stakeholder contact required
			• Forestry Commission – huge area of land

Stronachlachar	• "Art in the Landscape" - In 1810 a literary phenomenon swept through Britain, Europe and beyond: the publication of Sir Walter Scott's epic poem, "The Lady of the Lake", set in the wild romantic landscape around Loch Katrine and the Trossachs. • Water based recreation – launched in last 4 months – i.e. Walter Scott Steamship (http://www.lochkatrine.com/) • Abandoned Cascade south of Stronachlachar – not known about, opportunity to create a beauty spot – pylons run very close by, to the west. Existing courtyard, bunkhouse, cascade, loch shore - Planning application for workshops/ holiday lets – high end accommodation at present • Scottish Water own much of the land in this area which is leased to the Forestry Commission (100 Years) • Strong cultural element to the area – scope for promotion • Extensively used for recreation, private road around Loch Katrine used by walkers and cyclists	• Great Trossachs path network/ project – BP funding – RSPB, FCS, and Woodland Trust owned land - http://thegreattrossachsforest.co.uk/great-trossachs-path/what-is-the-great-trossachs-path/ • Strathard community trust - ecosystems project (http://www.strathardct.org.uk/) • Visitor attractions: How to fit something new in and avoid conflict with existing heritage, conservation objectives • Your Park initiative – by laws to manage camping e.g. Loch Arklet • Land/ funding for overnight stay (camping) opportunities – land at aqueduct, campsite, managed pull in for motorhomes? – keep people in the area rather than day tripping • Rhododendron clearance – ongoing initiative, generally successful across areas of implementation • Forestry commission – new building, subtlety designed intervention • Victorian water cascade, aqueduct outlet – little know asset, potential scope for promotion of this feature which is a short walk from the Stronachlachar • Built heritage of hydro – story of water & the dam	• Scottish water – Stakeholder contact required • Historic Scotland contact in relation to built heritage and understanding of assets • Local recreational user groups
Glen Gyle	• One of Scottish National Heritage's wild land areas • Lack of permanent tracks • 3-4 pylons on ridge – new interconnector/substation • http://www.explorelochlomond.co.uk/pulpit_rock.htm • Opportunity to promote and enhance Wild Land Policy	• Wildness studies – identifying key characteristics • Upgrade of Glen Gyle overhead line – SPEN upgrades	• SPEN contact required in relation to existing upgrade/maintenance works • SNH contact required in relation to draft WLA descriptions
Inverarnan	• A82 upgrade - Pulpit Rock: 17km of further road design work along A82 (CHZMHILL) – Drovers Inn to Tarbert – feasibility work/design, Scottish Government have no intention to implement the proposals imminently. • Innovative – Pylon design (Pylon competition) • Path to waterfall adjacent to waterfall near West Highland Way • Beinglas Campsite represents a honeypot area/key receptors (http://www.beinglascampsite.co.uk/)	• Inverarnan sub-station – scope for further mitigation • View from railway line/ upgrade of A82 - Screening proposals, removal of woodland opening up views across Loch Lomond and the surrounding landscape • End of life infrastructure on West Highland Way – Paths and Bridges along West Highland Way in desperate need of repair or replacement • Glen Falloch Estate - Land management, Estate plan discussions, run-off river, limited use/ access, refurbishment of existing 275kV OHL • Funicular - Loch Sloy, built heritage elements, recreational routes/ access for all	• Transport Scotland – contact required in relation to A82 works • West Highland Way user group contacts • Dear management groups

Loch Lomond & The Trossachs National Park Workshop Summary

Loch Lomond & The Trossachs National Park Authority Headquarters, Balloch - Friday, 12th June 2015

Line Section	Relevant Issues/Features	Other initiatives/projects in area	Additional Stakeholder Contacts
		• Scope to do something with existing pylon designs – Innovative 'stand out' design (i.e. Marching Men sculptures down the steep slopes) • Cairngorm Outdoor access trust & Mountains and People trust: Heritage Lottery Funded – £6.1 million over 5 years between both National Parks – improvement in existing paths ("adopt a path", visitor info, training programme) http://www.lochlomond-trossachs.org/looking-after/6.1m-boost-for-scottish-national-park-mountains/menu-id-483.html • Opportunities for vegetation clearance to open up views • Scottish Government Scenic Routes Initiative – An Ceann Mor at Inveruglas, alongside Loch Lomond (http://www.lochlomond-trossachs.org/visiting/scenic-routes/menu-id-981.html) £273k delivery cost for installation, now open to the public. Diverts the viewer away from the existing hydro power station and OHL infrastructure at Inveruglas and offers spectacular views of the Arrochar Alps in the west, and across Loch Lomond to Ben Lomond in the middle distance.	
Gleann nan Caorann	• Glen Falloch Estate (Sheep farming tenant farmers now gone) - Land management, Estate plan discussions, run of river hydro schemes, limited use/ access, refurbishment of existing 275kv OHL • Wild, scenic & remote landscapes, • Potential screen planting from key routes and footpaths	• Mountains and People Project – National Trust for Scotland (http://www.nts.org.uk/Mountains_For_People/) – initiative involving both National Parks in Scotland with Heritage Lottery Fund (HLF) funding. Ben Lui and Beinn Dubhchraig currently part of project. • National Trust for Scotland Footpath Fun (http://www.nts.org.uk/FootpathFund/ and http://oneweestep.org/) • Upland path build & maintenance construction skills	• Emma & Harriet – land advisors, landowner forum • Adele Shaw – Historic Scotland
Other Discussion Points	• 132kV OHLs classified as transmission lines in Scotland – clarified during discussions that distribution lines of less than 132kV, usually carried on wood poles, are not to be considered as part of the project unless rationalisation in some areas where transmission lines and distribution lines interact can deliver improvements in the visual impacts associated with transmission infrastructure (i.e. reducing the cumulative wirescape) • Discussion of undergrounding costs – SPEN quoted approximately £2-3million per km of OHL – undergrounding via cable route costs approximately 7x this cost per km (i.e. £14-21million per km) (depending on voltage). • Approximately 128km of SPEN transmission infrastructure located in Loch Lomond & The Trossachs National Park and NSAs in Scotland – SSE comparatively more. • SPEN and SSE would be required to act as both applicant and delivery agent for projects coming forward as part of the VIEW project • Heritage Paths Project – relevant routes/drove roads/paths located within National Park (http://www.heritagepaths.co.uk/) • Potential project themes emerging from discussions (each to be linked back to visual impacts): - Access/Recreation – Access for all - History & Heritage - Biodiversity & Conservation - Water - Communities		

Eildon & Leaderfoot NSA Meeting Summary

Scottish Borders Council Headquarters, Melrose – Wednesday, 23rd September 2015

Stakeholder Contacts				
Stakeholder Organisation	**Stakeholder Representative**	**Email**	**Att.**	**Dist.**
Scottish Borders Council	Siobhan McDermott, Landscape Architect	smcdermott@scotborders.gov.uk	•	
Scottish Borders Council	Keith Robeson	krobeson@scotborders.gov.uk	•	
Scottish Natural Heritage (SNH)	Frazer McNaughton	frazer.mcNaughton@snh.gov.uk	•	
Historic Scotland	Adele Shaw	adele.shaw@scotland.gsi.gov.uk		•
Historic Scotland	Rory McDonald	rory.mcdonald@dcot.gov.uk	•	
Southern Uplands Partnership	John Thomson	thomsonhughes@btinternet.com	•	
Southern Uplands Partnership	John Thomas	j.p.r.t@btinternet.com		•
Southern Uplands Partnership	Pip Tabor	piptabor@sup.org.uk	•	
SPEN	Grant Douglas	gdouglas@spenergynetworks.co.uk	•	
SPEN	Colin Wylie	cwylie@spenergynetworks.co.uk		•
LUC	Sam Oxley	sam.oxley@landuse.co.uk	•	
LUC	Laura Wilkinson	laura.wilkinson@landuse.co.uk		•
LUC	Alex Burton	alex.burton@landuse.co.uk	•	

Line Section	Relevant Issues / Features	Other initiatives / projects in area	Additional Stakeholder Contacts
AT Route (wood pole 132kV OHL through NSA)	**What is especially valued about these landscapes? & by whom?** • Diversity • Special qualities • NSAs has many layers including: cultural heritage, natural heritage, cultural landscape • NSA is unique in that the community is located within it •	• Recently opened Boarders Railway, bringing more visitors to the NSA • Scenic route initiative • Borders Abbeys Way • Route linking the four ruined abbeys in the region in Kelso, Jedburgh, Melrose and Dryburgh • section from Selkirk to Melrose passes in close proximity to the line near Abbots Moss • Southern Upland Way runs underneath the line just beyond the NSA boundary in the north • St Cuthbert's Way running from Lindisfarne to Melrose • Paths around Melrose booklet published the Scottish Borders Council • Booklet funded by the council but there is a small charge for it • 11 routes in and around Melrose • Existing network of routes NSA including a circular route around the Leader Water that goes under the line but is not being promoted • Many of the paths run in close proximity to the lines • No current applications for funding of these routes • There a movement that is encourages by the council for communities to take ownership of these routes – Melrose walking group is very active "best in the Borders".	
	Where do people go? Where are the honeypot areas? • Walking along the Tweed • A68 – road routes, tourist routes • Boarders Railway – Reopened Waverly Line, connection to Melrose (Sept 2015) potentially an important tourist route. • National Cycle Network • St Cuthbert's Way • Southern Upland Way • Borders Abbey Way • Journeys in to and out of NSA • non-inventory designed landscapes (NIDLs) along the Tweed • Car park used by people to walk up the Eildon Hills is owned by the angling club		
	What do people do in these areas? • Hill walking • Fishing • Economic links • Key attractions • Sport		

	What mitigation may be appropriate?
	• Focussing on angle towers
	  - Screening
	  - Changing
	• Rationalisation of corridors/ OHL running in parallel
	• Screening from road running in parallel – planting
	• Focus attractive views away from infrastructure
	• Soften wayleave		

Eildon & Leaderfoot NSA Meeting Summary

Scottish Borders Council Headquarters, Melrose – Wednesday, 23rd September 2015

Line Section	Relevant Issues/Features	Other initiatives/projects in area	Additional Stakeholder Contacts
	• Could use specific management strategies, opportunity for theses to have a large impact Two possible routes we could go down • Individual projects e.g. car parks; or • Community as a whole		
Other Discussion Points	• The NSA is a small area compared equivalent English AONB's. AONBs usually have fulltime staff and management plans. This is an important point to get across to OFGEM • Grant Douglas – Network is aging, possible upgrading and re-route when upgraded. Possibly re-plan the lines when upgrading, mitigation may come along with this. • SPEN led study of this infrastructure, may possibly be done by the end of the year. Information gathered during this study will help VIEW project. • Railway is a good starting point to the process as the government will be keen to recognise that their investment has been justified. • Grant Douglas – Scope for incorporating distribution lines to try rationalising/mitigate the transmission line as SPEN own it. • Merit in standing back and asking what does the NSA need to be improved and then seeing if this can be incorporated within the VIEW project • Merit in having a bold approach. • Significant part of the NSA is designed landscape, nothing is really been done the manage these. • A68 could be a scenic route; it is a gateway to Scotland and is nationally important • Sum of small projects could add up to a big project for NSA • Upgrades to the line may mean the installation of larger pylons – however upgrade of the line is not in the current investment program (of the next 8 years) • Possible strategy could be to pitch the management strategy and then layer funding for some of the actions on the back of it • NSA is only are in southern Scotland that can benefit from the fund, a good spin can be put on this politically. Very large potential catchment area • The management plan may be slightly tangential, but would be a very small percentage of the whole fund and could have a very large impact on the NSA • Management plan should have a chapter on wirescape • This could be a model project of how to solve problems with wire scape by using community involvement. The NSA is compact and well settled so serves as a good example. • This project has the scope help to improve mitigation strategies for OHL as a whole • Management strategy is a long-term ambition for SNH • Land ownership is fundamental within the NSA Eildon Hills • An important aspect of the NSA is views from looking towards it from the surrounding landscape • Possibility that the proposed management plan could be used as a catalyst to identify wirescape problems out with the NSA • Innovation and community involvement are likely to be rewarded by OFGEM • Dumfries & Galloway Management Strategy can serve as a good example • Proposed management plan need an action plan within it in order to make the most of the funding. Possible grant scheme could be incorporated into a second phase of the management strategy		

Appendix 4
Stage 2 – Summary of Stakeholder Engagement

Meeting Agenda

Changing the VIEW /VISTA Initiatives

Stakeholder Partnership Group Meeting, No 2.

Date and time	**Thursday, 3rd December 2015, 10:30am – 14:30pm**
Location	Radisson Blu Hotel, 301 Argyle Street, Glasgow G28DL https://www.radissonblu.com/en/hotel-glasgow?csref=ppc_g_cr_sk_uk_ho_glazh_brand&facilitator=BIGMOUTHMEDIAREZIDOR&gclid=CKX6mMDGlckCFQs8Gwod7pQKkw&

Arrive 10:00am for tea and coffee (10.00am – 10.30am)

Introductions and Update (10:30am – 11:00 am)

SPEN & SHE Transmission (Grant Douglas, SPEN & Richard Baldwin, SHETL)
Update on collaborative joint working for the Loch Lomond & The Trossachs National Park Area

- Introduce details of SPEN & SHETL Local Distribution Network mitigation initiatives – opportunities for collaboration with VIEW and VISTA;
- Role of stakeholder consultation - Stakeholder membership, admin and communications;
- Expansion of Stakeholder Partnership Group (SPG) membership;
- Suggested additional members: Forest Commission Scotland, Scottish Water, estates and landowners etc.;
- Potential Project Steering Group(s);

LUC Update (attendees TBC)
Update on work undertaken since last meeting

- Consultation, fieldwork, assessment and reporting;
- Format and objectives of the workshop;

Potential Projects (11:00am – 11:30am)

- Summary of infrastructure assessed and key impacts and potential mitigation proposals identified;
- Presentation of the key principles involved in mitigation:

Remove – Reduce – Distract

Break - Tea and coffee (11:30am – 11:45am)

SP Energy Networks (SPEN)

Ochil House
10 Technology Avenue
Hamilton International
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Blantyre
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view@spenergynetworks.co.uk

Scottish Hydro Electric Transmission Plc (SHE Transmission)

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Meeting Agenda

Changing the VIEW /VISTA Project

Stakeholder Partnership Group Meeting, No 2.

Group Workshop (11:45am – 12:45pm)

4 groups to look at each area and mitigation proposal, and consider positive and negative points in relation to:

- Landscape and visual;
- Natural and Built Heritage (i.e. Biodiversity, Cultural Heritage);
- Tourism/visitors/socio-economic;
- Value for money (High level Cost Benefit Analysis (CBA)).

Lunch (13:00pm – 13:30pm) – opportunity to discuss projects further over lunch

Feedback from Group Workshop & voting for proposals (13:30pm – 14:20pm)

Go through each area/project in turn and take feedback on:

- Negative/positive aspects;
- Value for money/Best Value;
- Other ideas;
- Stakeholder members will be asked to vote on each section and mitigation proposal individually in relation to how they should be prioritised for progression (Show of hands and documented on PowerPoint);
- Summary of voting;

Close of meeting (14:20pm – 14:30pm END)

- Next steps;
- Request for volunteers for next stage – take list of stakeholder members and contact details for follow up correspondence;
- Any other questions or queries from SPG to SPEN/SHETL/LUC;
- SPEN/SHETL/LUC – Thanks for attendance;

Notes of comments and actions to be taken by SPEN/SHETL/LUC representatives and circulated following the event.

Please provide your feedback and responses to view@spenergynetworks.co.uk, and vista@sse.com, or write to addresses below.

SP Energy Networks (SPEN)

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10 Technology Avenue
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Scottish Hydro Electric Transmission Plc (SHE Transmission)

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Meeting Handout

Changing the VIEW /VISTA Initiatives

Stakeholder Partnership Group Meeting, No 2.

Date and time **Thursday, 3rd December 2015, 10:30am – 14:30pm**

Location Radisson Blu Hotel, 301 Argyle Street, Glasgow G28DL

List of potential projects and options

YW.1 Gleann nan Caorann

A: Undergrounding through Ben Lui Wild Land Area
B: Landscape enhancement: native woodland planting

YW.2 Inverarnan

A: Undergrounding from Inverarnan into Glen Gyle
B: Alternative/sculptural pylon design between Inverarnan and Cruach
C: Landscape enhancement around substation/A82/West Highland Way
D: Installation of a sculptural incident or attraction

YW.3 Glen Gyle

A: Undergrounding through Glen Gyle
B: Landscape enhancement: native woodland planting

YW.4 Stronachlachar, Loch Katrine

A: Undergrounding a short section above Stronachlachar Pier
B: Minor re-route of short section above Stronachlachar Pier
C: Landscape enhancement: native tree and shrub planting
D: Installation of a sculptural incident or attraction

YW.6/7 Loch Ard Forest

A: Restructuring of forestry and wayleaves, improved access along aqueduct route

YW.8 East of Drymen

A: Undergrounding from National Park boundary towards Flanders Moss
B: Re-route overhead line away from National Park gateway
C: Landscape improvement along key access routes to screen views
D: Art installation(s) on key access routes to draw views

CL/CK1: Glen Fruin

A: Undergrounding through Glen Fruin
B: Re-route overhead line outside the National Park
C: Landscape enhancement along the Three Lochs Way and alternative walking route

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Meeting Handout

Changing the VIEW /VISTA Project

Stakeholder Partnership Group Meeting, No 2.

List of potential projects and options (continued)

SHET.4 Killin

A: Undergrounding to the north-west of Killin
B: Alternative/sculptural pylon design above Killin and Falls of Dochart

SHET.5 Glen Dochart

A: Reposition most prominent pylons along the A85
B: Enhanced off-road cycleway/footpath and associated native planting

SHET.6 Glen Falloch

A: Undergrounding between the foot of Gleann nan Caorann and Crianlarich
B: Restore and expand native pine forest in Glen Falloch

SHET.9 Inveruglas and Glen Sloy

A: Rationalisation of infrastructure, including distribution, in Glen Sloy area
B: Native woodland planting in the glen, new path at Inveruglas

SHET.10/11 Loch Long and Arrochar

A: Undergrounding from the National Park boundary to Glen Loin
B: Re-route overhead line outside the National Park
C: Landscape enhancement along the Three Lochs Way and alternative walking route
D: Woodland planting south of Arrochar

SHET.14 Glen Finlas, Cowal

A: Soften visual impact of wayleaves through felling and planting

AT/U/V Eildon and Leaderfoot NSA

A: Undergrounding of line through the NSA
B: Re-route or replace overhead lines so they run outside the NSA
C: Development of an Eildon and Leaderfoot NSA Management Plan

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Meeting Handout

Changing the VIEW /VISTA Project

Stakeholder Partnership Group Meeting, No 2.

Key to cost and mitigation scales

The indicative costs for each scheme have been identified at a very high level, solely for the purposes of enabling a comparison between schemes of a different nature. The costs ranges identified below are to guide decision making and do not represent fully costed scenarios.

Indicative Costs	
£££££££	more than £200 million
£££££	£100 – 200 million
£££££	£50 – 100 million
£££	£5 – 10 million
££	£1 – 5 million
£	less than £1 million

Similarly, the 'effectiveness of mitigation' scale has been devised to facilitate comparison of the potential benefits of different proposals. It does not seek to reflect all the possible variables of benefit and impact.

Effectiveness of Mitigation:	
★★★★★	Very High - complete mitigation of impacts
★★★★	High - extensive mitigation of impacts
★★★	Medium - partial mitigation of impacts
★★	Low - minor mitigation of impacts
★	Very Low - impacts remain unaltered

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Meeting Handout

Changing the VIEW /VISTA Project

Stakeholder Partnership Group Meeting, No 2.

Project contact details

Scottish Power Energy Networks: Changing the VIEW

Write to:

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Website:

http://www.spenergynetworks.co.uk/pages/view_project.asp

Scottish Hydro Electric Transmission: VISTA

Write to:

SHE Transmission VISTA Initiative Team
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vista@sse.com

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Voting sheet

Changing the VIEW /VISTA Initiatives

Stakeholder Partnership Group Meeting
Thursday, 3rd December 2015 – Radisson Blu Hotel, Glasgow

After today's meeting we will be developing a number of projects for submission to Ofgem. To help us to select the right projects, we would like to have a clear indication from our stakeholders on which options are seen as worthy of further development.

At the end of today's meeting, we will have a short 'voting' session, where we will recap each proposal and ask you to indicate whether or not you think each project should be prioritised. Please indicate by ticking the boxes below:

- "High priority" if you think this proposal merits further development
- "Low priority" if you think this project does not merit further development

Please add your name and organisation for the record:

Proposal	High priority	Low priority
YW.1 Gleann nan Caorann		
A: Undergrounding through Ben Lui Wild Land Area		
B: Landscape enhancement: native woodland planting		
YW.2 Inverarnan		
A: Undergrounding from Inverarnan into Glen Gyle		
B: Alternative/sculptural pylon design between Inverarnan and Cruach		
C: Landscape enhancement around substation/A82/West Highland Way		
D: Installation of a sculptural incident or attraction		
YW.3 Glen Gyle		
A: Undergrounding through Glen Gyle		
B: Landscape enhancement: native woodland planting		
YW.4 Stronachlachar, Loch Katrine		
A: Undergrounding a short section above Stronachlachar Pier		
B: Minor re-route of short section above Stronachlachar Pier		
C: Landscape enhancement: native tree and shrub planting		
D: Installation of a sculptural incident or attraction		
YW.6/7 Loch Ard Forest		
A: Restructuring of forestry and wayleaves, improved access along aqueduct route		

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Voting sheet

Changing the VIEW /VISTA Project

Stakeholder Partnership Group Meeting, No 2.

Proposal	High priority	Low priority
YW.8 East of Drymen		
A: Undergrounding from National Park boundary towards Flanders Moss		
B: Re-route overhead line away from National Park gateway		
C: Landscape improvement along key access routes to screen views		
D: Art installation(s) on key access routes to draw views		
CL/CK1: Glen Fruin		
A: Undergrounding through Glen Fruin		
B: Re-route overhead line outside the National Park		
C: Landscape enhancement along the Three Lochs Way and alternative walking route		
SHET.4 Killin		
A: Undergrounding to the north-west of Killin		
B: Alternative/sculptural pylon design above Killin and Falls of Dochart		
SHET.5 Glen Dochart		
A: Reposition most prominent pylons along the A85		
B: Enhanced off-road cycleway/footpath and associated native planting		
SHET.6 Glen Falloch		
A: Undergrounding between the foot of Gleann nan Caorann and Crianlarich		
B: Restore and expand native pine forest in Glen Falloch		
SHET.9 Inveruglas and Glen Sloy		
A: Rationalisation of infrastructure, including distribution, in Glen Sloy area		
B: Native woodland planting in the glen, new path at Inveruglas		
SHET.10/11 Loch Long and Arrochar		
A: Undergrounding from the National Park boundary to Glen Loin		
B: Re-route overhead line outside the National Park		
C: Landscape enhancement along the Three Lochs Way and alternative walking route		
D: Woodland planting south of Arrochar		
SHET.14 Glen Finart, Cowal		
A: Soften visual impact of wayleaves through felling and planting		
AT/U/V Eildon and Leaderfoot NSA		
A: Undergrounding of line through the NSA		
B: Re-route or replace overhead lines so they run outside the NSA		
C: Development of an Eildon and Leaderfoot NSA Management Plan		

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SP Energy Networks – Changing the VIEW (Visual Impact of Existing Wirescape) Project

On **Wednesday, 17th February 2016** ScottishPower Energy Networks and Scottish Hydro Electric Transmission will be holding a joint stakeholder drop-in session between **12noon–2pm** at Loch Lomond and The Trossachs National Park Authority Headquarters in Balloch (details of how to find the venue can be found here: http://www.lochlomond-trossachs.org/looking-after/contact-us/menu-id-471.html)

The informal drop-in session will provide a further opportunity for stakeholders to contribute feedback on the sections of pre-existing transmission infrastructure located within the Loch Lomond and The Trossachs National Park which have been identified for potential mitigation in respect of landscape and visual impacts, building on the feedback received during the last Stakeholder Partnership Group workshop held in Glasgow in December 2015.

Representatives from both SP Energy Networks and SHE Transmission, along with consultants from LUC who have undertaken the assessment of impacts, will be on hand to talk through progress on the projects to date, answer any questions and explain the next stages of the VIEW and VISTA projects.

The drop-in session represents one of the last opportunities for stakeholders to provide feedback on this stage of the consultation and influence the next stages of the project, including the selection of infrastructure to be considered in more detail, in anticipation of the submission of potential mitigation projects to OFGEM later this year.

You can find out more about the projects, including the sections of transmission infrastructure currently being considered on the project webpages:

- VIEW Project Webpage: http://www.spenergynetworks.co.uk/pages/view_project.asp
- VISTA Project Webpage: https://www.ssepd.co.uk/vistaconsultation/

Thank you once again for your interest and support in the VIEW and VISTA Projects as they have developed over recent months. There is no need to book to attend, however if you are able to attend please confirm your attendance by return of this email.

We look forward to hopefully seeing some of you at the drop-in session next week.

Kind regards,

VIEW Team, SP Energy Networks

Drop-in session Handout

Changing the VIEW /VISTA Initiatives

Date and time	**Wednesday, 17th February 2016, 12noon – 15:00pm**
Location	Loch Lomond & The Trossachs National Park Authority Headquarters, Carrochan, Carrochan Road, Balloch G83 8EG

Briefing Note

Introduction

We are seeking to complete **Stage 2** of the projects (see indicative timeline on Introductory board) and require the Input, comments and feedback of Stakeholders In relation to the sections of line Identified for further consideration, and the potential proposals Identified to mitigate the key visual and landscape impacts.

The Landscape and Visual Impact Assessment (LVIA) of existing Infrastructure within the Loch Lomond & The Trossachs National Park Identified 13 sections of overhead line/ areas for further consideration:

- **7 sections** in the SPEN licence area within the LLTNP
- **6 sections** in the SHE Transmission licence area within the LLTNP

What do we want you to do?

Stakeholders to look at each board presenting the key landscape and visual Impacts and mitigation proposals Identified for each section.

Consider positive and negative points and provide comments in the accompanying worksheets in relation to:

- Landscape and visual Impacts;
- Natural and Built Heritage (i.e. Biodiversity, Cultural Heritage);
- Tourism/visitors/socio-economic;
- Best Value (High level Cost Benefit Analysis (CBA)).

Capital Costs vs Effectiveness of mitigation

Key Questions:

- Which line sections/areas **deserve most attention**?
- What are the **key Issues** to be considered?
- What are the **biggest challenges** and **opportunities**?
- Which line sections/areas would Stakeholders like to take forward for more **detailed consideration**?
- Which **mitigation proposals** should be **developed in more detail**?

Voting / polling

Please complete a voting/polling sheet In relation to which mitigation proposals should be considered further by indicating whether the proposal is: **High Priority** or **Low Priority**

(NOTE: Please feel free to provide any further comments and feedback on the Initiatives, Impacts identified and mitigation proposals.)

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Drop-in session Handout

Changing the VIEW /VISTA Initiatives

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Similarly, the 'effectiveness of mitigation' scale has been devised to facilitate comparison of the potential benefits of different proposals. It does not seek to reflect all the possible variables of benefit and impact.

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Drop-in session Handout

Changing the VIEW /VISTA Initiatives

Project contact details

Scottish Power Energy Networks: Changing the VIEW

Write to:

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Changing the VIEW & VISTA
Stakeholder Meeting Agenda

Date and time: Thursday, 7th April 2016, 11am – 2pm

Location: Loch Lomond & The Trossachs National Park Authority Headquarters, Balloch

Name	Organisation / Email	Att.	Dist.
Mairi Bell	Loch Lomond & The Trossachs National Park (mairi.bell@lochlomond-trossachs.org)	•	•
Liz Buchanan	Visit Scotland (liz.buchanan@visitscotland.com)	•	•
David Adams McGilp	Visit Scotland (david.adamsmcgilp@visitscotland.com)	•	•
John Hair	Forestry Enterprise Scotland (john.hair@forestry.gsi.gov.uk)	•	•
Louise Bond	SEPA (louise.bond@sepa.org.uk)	•	•
Allan Fail	Scottish Water (allan.fail@scottishwater.co.uk)	•	•
Rebecca Williams	Scottish Water (rebecca.williams@scottishwater.co.uk)	•	•
Grant Douglas	SP Energy Networks (gdouglas@spenergynetworks.co.uk)	•	•
Euan Smith	SHE Transmission (euan.smith@sse.com)	•	•
Kenneth Reid	SHE Transmission (kenneth.reid@sse.com)	•	•
Paul Macrae	LUC (paul.macrae@landuse.co.uk)	•	•
Dan Walker	LUC (dan.walker@landuse.co.uk)	•	•

Introductions (11.00 – 11.10am):

Background to initiatives & Progress (11.10 – 11.45am):

SPEN & SHE Transmission (Grant Douglas, SPEN & Euan Smith & Kenneth Reid, SHE Transmission)
Update on collaborative joint working across the Loch Lomond & The Trossachs National Park

- Aspirations and objectives for the initiatives;
- Role of stakeholder consultation - Stakeholder membership, admin and communications;
- Introduce details of SPEN & SHE Transmission Local Distribution Network mitigation initiatives – opportunities for collaboration with Changing the VIEW and VISTA;
- Expansion of Stakeholder Partnership Group (SPG) membership.

LUC Update on Initiatives (Dan Walker & Paul Macrae, LUC)
Update on work undertaken to date.

- Overview of project stages
- Consultation, fieldwork, assessment and reporting;
- Selection of preferred projects;
- Summary of infrastructure assessed and key impacts and potential mitigation proposals identified;
- Presentation of the key principles involved in mitigation. '**Remove – Reduce – Refocus'**.

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Changing the VIEW & VISTA
Stakeholder Meeting Agenda

Outline of Potential Projects - **Feedback, comments on Projects** (11.45am – 1.00pm):

Presentation of each area and project currently being considered. Opportunity to discuss each area/project in turn and take feedback on.

- Negative/positive aspects – key issues which may arise in relation to each project;
- Value for money/Best Value;
- Other ideas, initiatives, potential projects;
- Identification of high/low priority projects (preferred/not preferred).

Close of meeting (1.00pm):

- Next steps for initiatives;
- Continued involvement of stakeholders in next stages;
- Any other questions or queries from stakeholders to SPEN/SHE Transmission/LUC

(Please note: LLTNPA have provided use of the meeting room until 2pm, therefore between 1.00-2.00pm there will be further opportunity to discuss the initiatives and potential projects in more detail if stakeholders wish).

Notes of comments and actions to be taken by SPEN / SHE Transmission / LUC representatives and circulated following the meeting.

Please provide any additional feedback and responses to view@spenergynetworks.co.uk and vista@sse.com or write to the addresses below.

More information about the initiatives can be found at the following webpages.

Changing the VIEW: http.//www.spenergynetworks.co.uk/pages/view_project.asp
VISTA: https.//www.ssepd.co.uk/vistaconsultation/

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LOCH LOMOND & THE TROSSACHS NATIONAL PARK

Grant Douglas
SP Energy Networks
Ochil House
10 Technology Avenue
Hamilton International Technology Park
Blantyre
G72 0HT

21st March 2016

Dear Grant,

Changing the VIEW/VISTA projects

Loch Lomond and The Trossachs National Park Authority have welcomed the opportunity to be involved as a stakeholder during the first two stages of the Changing the VIEW/VISTA projects.

As part of both project programmes we have been represented on the external stakeholders group, attending meetings in Glasgow and have facilitated an internal LLTNP stakeholders group. As you know the Park Authority staff have engaged positively and shown great enthusiasm and interest in the potential of the mitigation of the key landscape and visual impacts on the sections of lines identified for further investigation. There is a realisation that the projects selected could achieve multiple gains for many of the projects and visions we have for the Park in terms of Conservation, Visitor Experience and Visitor Management.

We have also hosted a display of project boards and the latest wider stakeholder meeting, enabling the completion of worksheets to provide you with comments on the positive and negative points of each of the sections of lines identified.

The projects are of interest to a wide range of stakeholders with differing objectives and so we consider it important to state our own preference in relation to the Park Authorities conservation objectives and the most positive gains that could be achieved in terms of landscape gain and visitor experience.

We consider the following two line sections to be our preferred projects to take further;

YW.4 STRONACHLACHAR

Underground or minor re-routing of a short section above Stronachlachar Pier

We consider that this proposal is our preferred option should there only be one opportunity due to capital costs. This key view at the head of Loch Katrine is experienced by a large number of tourists whether travelling by steamer, visiting the viewpoint at the Pier and café by foot, car or bicycle and would result in the most benefit to the experience of all members of the public including residents, tourists to the Great Trossachs Forest, Great Trossachs Trail and the aims of the National Park.

SHET.6 GLEN FALLOCH

Undergrounding between the foot of Gleann na Caorann and Crianlarich and/or Restoration and expansion of native pine forest in Glen Falloch.

We consider this would mitigate a very intrusive pylon at the side of the A82 and could be tied in with the restoration of the native Caledonian pinewood remnants in the glen.

There is potentially an opportunity for the development of a new viewpoint along this stretch of the A82 where at present there is no real opportunity to stop and enjoy a closer view of the Pinewood at its most spectacular. This would require consultation with Glen Falloch estate. We could assist with this.

Landscape Enhancement Package for wider woodland planting, softening of wayleaves, footpath improvements, catchment and green infrastructure improvement works

In addition to the two sections identified above we would also welcome the inclusion of a Landscape Enhancement Package covering the following line sections;

SHET.9 INVERUGLAS AND GLEN SLOY

This area has seen the recent development of a new substation around which some landscape mitigation was carried out. Further works to enhance this area would be welcomed as well as opportunities to improve existing paths and tie in with the Parks aspirations for the A82 upgrade and likely accommodation works at Inveruglas bridge.

YW.6/7 LOCH ARD

This section of line sits within the Strathard Project area * which has considerable wider stakeholder interest in terms of natural flood management and community aspirations.

The Park Authority are fully supporting this ecosystem services project and would endorse the restructuring of the forestry and wayleaves to enable water capture, improve visual qualities and visual experience as well as improvements to access routes.

Alternative pylon design

There are two locations, at Inverarnan and Killin, where alternative pylon design has been included in your assessment work as worthy of consideration. We are conscious that this sort of vision would result in huge valency of public opinion. Whilst the idea of these is interesting to us these options might be best considered as a more national design competition with its own selection process. We do however support the enhancement of our scenic routes and in particular options for the on-going tourism offer on the A82 and Park gateways.

Future Project Engagement

We trust that this letter will assist your selection process and we look forward to working with you on the future development of the projects for submission to Ofgem.

Yours sincerely

Sara Melville

Sara Melville
Landscape Adviser,
Conservation Team

*http://www.thecommunitypartnership.org.uk/strathard-ecosystem-project-2/

LOCH LOMOND & THE TROSSACHS NATIONAL PARK AUTHORITY
National Park Headquarters, Carrochan, Carrochan Road, Balloch, G83 8EG Long: 4°34'24"W Lat: 56°00'12"N
t: 01389 722600 f: 01389 722633 e: info@lochlomond-trossachs.org w: lochlomond-trossachs.org

Loch Lomond Trossachs National Park
Changing the VIEW /VISTA Project – SNH comments on alternative proposals. **10.03.2016**

Overhead Line Section Proposal	High Priority?	Comments
YW 1 Gleann nan Caorann		
A. Undergrounding through Ben Lui Wild Land Area	No	Majority within WLA. Although track along line length not heavily used. Eastern end visible from WHW and A82. Visible from Ben Lui and Ben Oss. Undergrounding, although in theory very visually beneficial, very expensive and concerns over how line of undergrounding could be restored following works. Enhancement planting would need fencing (as existing planting overgrazed) so this would affect wild land qualities. Probably not the most high priority area in the NP.
B. Landscape enhancement: native woodland planting		
YW 2 Inverarnan		
A. Undergrounding into Glen Gyle	Possibly	The pylons on this line are highly visible on the skyline when travelling on the A82, and at the western end when quite close to the line. Line direction change pylons and those on skylines most obvious. Line visible from WHW, which passes under it. 4 alternatives suggested. New installation – too close to new one just to south to be realistic proposal, although if there were scope to move most obvious pylons this could minimise the impact of the line Alternative design of pylon – would draw more attention to pylons than existing ones do. Landscape enhancement planting could help to screen lower level features such as substation for relatively small cost. Undergrounding could be effective, but similar concerns about vegetation reinstatement and cost as in YW1. Think that there are more deserving areas in the NP.
B. Alternative / sculptural pylon design between Inverarnan and Cruach		
C. Landscape enhancement around substation/A82/West Highland Way		
D. Installation of a sculptural incident or attraction		
YW 3 Glen Gyle		
A. Undergrounding through Glen Gyle	Yes, esp. at southern end	Completely in WLA. If had to focus on some works here, would prefer to see undergrounding at southern end, linking into YW4,
B. Landscape enhancement: native woodland planting		

Overhead Line Section Proposal	High Priority?	Comments
		which we consider a high priority area. Enhancement planting would probably be done anyway as part of the GTF initiative.
YW 4 Stronachlachar		
A. Undergrounding a short section above Stronachlachar	Yes	Northern end in WLA. Highly visible from Loch Katrine Pier in middle of Loch. High profile tourist area, therefore would benefit public widely and in central part of NP. Undergrounding (although precise route unclear – would need clarification) preferable to rerouting. Costs proportionate to benefits. Would not support new installation as this would add to existing tourism related features that detract from the landscape experience of the area.. Enhancement planting has some merit to focus views.
B. Minor re-route of short section above Stronachlachar Pier		
C. Landscape enhancement: native tree and shrub planting		
D. Installation of a sculptural incident or attraction		
YW 6/7 Loch Ard Forest		
A. Restructuring of forestry and wayleaves, improved access along aqueduct route	No	Difficult to see what benefit this planting would give, given relative inaccessibility. Wouldn't resolve scale issues. Appreciate that it can be seen from Ben Lomond and Rob Roy Way. Wouldn't the planting happen anyway, independently of this project, as part of the Loch Ard Forest management plan? The photos on the information sheet demonstrate that the line is difficult to pick out from several viewpoints, although we are unclear of how typical a representation of the line these are.
YW 8 East of Drymen		
A. Undergrounding from national park boundary towards Flanders Moss	Possibly	This is a wide, open landscape so pylons are not out of context or particularly prominent. Gateway area on the edge of the NP and close to settlement. Lots of local walks and WHW/Rob Roy Way/John Muir Way in close proximity. Unsure of route of undergrounding as description does not match the map and also unsure of benefits of realignment as seems to stop in middle of nowhere to east of existing line. Enhancement planting could have some benefits in deflecting views from various LDRs, as could a new art installation. Feel that there are
B. Re-route overhead line away from National park gateway		
C. landscape improvement along key access routes to screen views		
D. Art installation(s) on key access routes to draw views		

Overhead Line Section Proposal	High Priority?	Comments
		other locations where undergrounding would be more beneficial, so a lower priority here.
CL/CK1 Glen Fruin		
A. Undergrounding through Glen Fruin	No	Near Helensburgh. Special valley with minor road through it used primarily by visitors. On periphery of NP. Double line, so instantly more benefits than a single line. Noted that undergrounding is cheaper in this location due to terrain, but question the wisdom of stopping it right at the park boundaries. How high profile is this area really? Feel that there are more high profile areas in the NP where funding could be targeted. Unsure that rerouting along a ridge would be a satisfactory solution, albeit out of the actual park, but affecting its setting. Enhancement planting unlikely to be that effective given scale of pylons and double line.
B. Re-route overhead line outside the National Park		
C. Landscape enhancement along the Three Lochs Way and alternative walking route		
SHET 4 Killin		
A. Undergrounding to the north-west of Killin	No	Another double line, but unsure how much you see these – probably only really noticeable when skylined. May be because they are on hills which are quite low in the local area context. On the edge of the NP. Alternative pylon design could draw more attention to the lines, so feel this is not the solution here.
B. Alternative / sculptural pylon design above Killin and Falls of Dochart		
SHET 5 Glen Dochart		
A. Reposition most prominent pylons along the A85	No	Visible from the Rob Roy/Pilgrim's Way and Ben Ledi. But a wide valley with roads and settlement, so not totally out of context here. Generally backclothed too. Not that high a priority area.
B. Enhanced off road cycleway/ footpath and associated native planting		
SHET 6 Glen Falloch		
A. Undergrounding between the foot of Gleann nan Caorann and Crianlarich	Possibly (undergrounding)	Between 2 WLAs, in valley bottom. On main A82 Fort William/Glasgow route so seen by many, and line crosses the road. Enhancement planting could detract from the existing distinctive vegetation pattern.
B. Restore and expand native pine forest in Glen Falloch		
SHET 9 Inveruglas and Glen Sloy		
A. Rationalisation of infrastructure, including distribution, in Glen Sloy area.	Yes, esp rationalisation	Can be seen from Loch, ferries, hotel and visitors centre. High profile site and rationalisation good cost benefit.

Overhead Line Section Proposal	High Priority?	Comments
B. Native woodland planting in the Glen, new path at Inveruglas	proposals	
SHET 10/11 Loch Long and Arrochar		
A. Undergrounding from the National park boundary to Glen Loin	Possibly	Important gateway area from the west and popular tourist route. Area set to be developed as part of NP Plan.
B. Re-route overhead line to avoid immediate setting of Arrochar and reduce prominence of pylons on skyline		
C. Landscape enhancement along the Three Lochs Way and alternative walking route		
D. Woodland planting south of Arrochar		
SHET14 Glen Finart, Cowal		
A. Soften visual Impact of wayleaves through felling and planting	No	Is this area visible to many people? Suggest that this could be achieved through Forest Planning.

LUSS ESTATES COMPANY

Our Ref: SJM/KPG

23rd March 2016

Gordon Watson
Chief Executive Officer
Loch Lomond & The Trossachs National Park Authority
Carrochan Road
Balloch
G83 8EG

Dear Gordon,

LUSS GLENS 'VISTA/VIEW' CONSULTATION

First of all please accept my apologies for the tardiness of this submission to the VISTA/VIEW consultation.

As a major landowner in the west Loch Lomond area, with property stretching from Glen Fruin in the south to Tarbet and Arrochar in the north and with interests in agriculture, forestry, small scale hydro power and tourism, Luss Estates Company welcomes the opportunity to make a positive contribution to the VISTA/VIEW consultation exercise.

Countryside access, conservation and the quality of the landscape are important issues for us and we already work closely on these matters with the National Park as well as with Helensburgh and District Access Trust and The Friends of Loch Lomond and The Trossachs; two local charities which are very active in the area and whose focus on these matters we share. We understand they are making separate VISTA/VIEW submissions to you.

Over the past 10 years or so we have worked especially closely with HADAT, helping them to develop their Three Lochs Way (TLW) long distance walking trail, which utilises pre-existing tracks and roads through the estate in a number of areas, most importantly between Glen Douglas and Tarbet and in Glen Fruin. However, although the trail has achieved a measure of popularity, it suffers significant adverse visual impact from high voltage lines and their supporting pylons throughout its length, especially so in its northern sections from Glen Fruin to Inveruglas. By rerouting the TLW through the Luss Glens the VISTA/VIEW project offers an excellent opportunity to mitigate these negative impacts. An obvious alternative route for the trail using historic rights of way exists through Auchengaich Glen, Glens na Caorainn, Mollochan and Douglas and "The String", a high pass between Glen Douglas and Arrochar. Apart from mitigating the visual impact of the power lines, this new route would create a link with Luss, which at present is the only community in the area which does not have an effective link with The Three Lochs Way. By opening up the beautiful Luss Glens to TLW users, we believe that these improvements would have a transformational impact on recreational opportunities in our area. In principle we would support the construction of such a path.

Arnburn, Arden, Argyllshire G83 8RH T: 01389 713100 F: 01389 850216 estateoffice@lussestates.co.uk

Chief Executive Officer: Simon J Miller BSc, MBA

Reg. No. 36741 VAT Reg. No. 264 5802 51

We know that there is also a desire on the part of HADAT to utilise the recently constructed power line service track in Glen Fruin so as to by-pass a 4 kilometre stretch of public road. However this would require the construction of a bridge over the River Fruin and if a way could be found to incorporate this idea in any overall scheme which might emerge under VISTA/VIEW then that would confer still further benefits in terms of increasing the proportion of the TLW route which was traffic free.

Furthermore an additional opportunity exists on our land to improve both The Three Lochs Way and the John Muir Way routes. This would require the construction of a new path in our neighbour's Camis Eskan plantation linking the existing Three Lochs Way route there with the Old Luss Road, which crosses our land nearby just east of the A818, around Grid reference 315840. This new route would improve the quality of the walking experience for people on both of these routes by significantly reducing the proportion of busy roadside walking. Owing to the proximity of the pylons in this area some arboreal screening would also be beneficial and, once again, this would confer additional advantages all round in terms of improvement to habitat etc.

Yours sincerely,

Simon J Miller BSc, MBA
Chief Executive Officer

THREE LOCHS WAY LUSS GLENS 'VIEW' PROJECT

This project is jointly proposed by Helensburgh and District Access Trust ('HADAT'), The Friends of Loch Lomond and The Trossachs ('The Friends') and Luss Estates Company.

Helensburgh and District Access Trust is a charitable trust which specializes in improving countryside access in and around Helensburgh and the Clyde Sea Lochs. The Friends is an independent conservation and heritage charity whose focus is on protecting, promoting and providing for the area covered by Loch Lomond and The Trossachs National Park. Luss Estates Company is a major landowner in the west Loch Lomond area with property stretching from Glen Fruin and Arden in the south of the area to Tarbet, Arrochar and Ardlui in the north. The company has interests in agriculture, forestry, small scale hydro power and tourism.

Linking communities along the shores of Loch Lomond and the Clyde Sea Lochs, the Three Lochs Way (TLW) is a fairly new and increasingly popular long distance walking and biking trail which has achieved national recognition as one of 'Scotland's Great Trails'. Dipping in and out of the south western fringes of the Loch Lomond and The Trossachs National Park, the route affords stunning views over Loch Lomond, The Firth of Clyde, The Gareloch and Loch Long and links Balloch, Cardross, Helensburgh, Garelochhead, Arrochar, Tarbet and Inveruglas.

Given that for almost its whole length it snakes along under the high voltage line between Sloy and the Vale of Leven, it is considered that route improvements and extensions/diversions to open up Luss Glens and links with the popular village of Luss, which currently attracts 750,000 visitors a year, would be a very strong candidate for investment as part of the VIEW project. The improvements and additions would create a range of family friendly easy and medium grade walking and cycling opportunities in a scenically attractive area within easy reach of large population centres.

Between Glen Fruin and Arrochar the existing route is particularly close to the pylons and opportunities exists here to re-route the trail through Glen Fruin and through the Luss Hills area using existing historic rights of way by Auchengaich and Glens na Caorainn, Mollochan and Douglas and "The String", a high pass between Glen Douglas and Arrochar. Apart from mitigating the visual impact of the power lines, this new route would create a link with Luss, which is seen as a key component in the area's overall tourism offering, but at present is the only community in the area which does not have an effective link with The Three Lochs Way. By utilising the recently constructed power line service track in Glen Fruin, it will be possible to by- pass a 4 kilometer stretch where the present route uses the old Glen Fruin public road. This would require the construction of a bridge over the River Fruin. Indicative costs for the bridge and new sections of trail are shown in the schedule below.

Because the existing TLW has been created 'piecemeal' and with very limited funding, there are a number of other improvements which could be made to the

route at points where the trail is within clear sight of the power lines and these are also included in the schedule. There is also potential to create additional car parking in key locations such as the village of Arrochar where the Three Lochs Way and the Cowal Way come together in close proximity to the power lines but this requires further investigation.

It is anticipated that a suitable charitable vehicle will be required to deliver the project and although both The Friends of Loch Lomond and HADAT fit this bill, it is anticipated that most likely it would be The Friends which would take the lead.

Given the scale of this project and given the limited staff resources within HADAT, The Friends and Luss Estates, securing the services of a Project Manager and a Ranger is seen as an essential element to take things forward - perhaps a Project Manager for 3 years at circa £100k (say £33,333/yr) and a Ranger at circa £75k (say £25,000/yr) for 3 years to kick in yr 2 or 3 of 5 year project – both including office/travel costs. Having such a dedicated resource is fully justified and would mean there could be effective project management/promotional/community engagement arrangements in place. HADAT and/or The Friends could host this, with staff reporting to a small management group with reps from HADAT, Luss Estates, the Friends, Spenergery Networks and the National Park Authority - something fairly simple and not too time consuming.

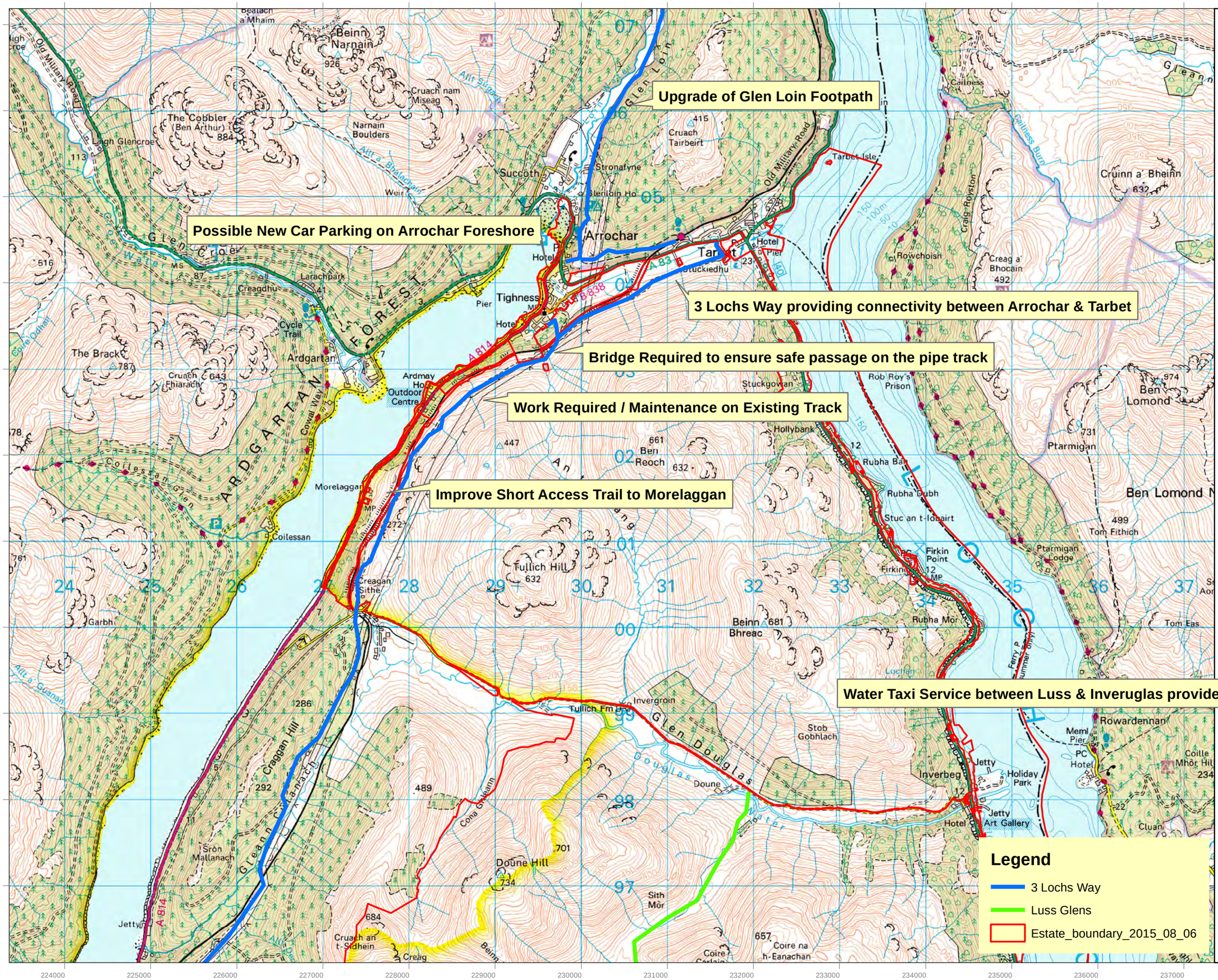
As part of preparatory work for the bid document, it is suggested that LUC be asked to do more groundwork on the initiative. This would include detailed site surveys, photography, path alignment and design studies, cost estimation etc. We suggest John Urquhart of HADAT and The Friends and Ian Wilkinson of Luss Estates are tasked with liaising closely with LUC on this.

Initial schedule of approximate costings based on an "As Dug" method of path construction assuming a 1 metre nominal width of path costed at a realistic figure of £30 per linear metre. Although it is assumed all construction materials will be won on site, a 10% contingency is included to take account of situations where local materials prove unsuitable as well as snagging works to rectify drainage and other issues which become apparent as the works bed in during the first few years of use.

	Item	**Cost £**
1	Auchengaich to Gleann na Caorainn 4.5km	135,000
2	Glen Luss to Glen Douglas 6km	180,000
3	Garelochhead Link 1km	30,000
4	New trail over the String pass 7km	210,000
5	Bridges at Tighness and Glen Fruin	60,000
6	Improve faulty sections of the existing Three Lochs Way trails between Glen Fruin and Balloch	100,000
7	Improve the drainage and surface of the existing water main service track between	50,000

	Glen Douglas and Tarbet.	
8	Improve existing Murlaggan access trod.	5,000
9	Waymarking and promotion, interpretation and the revision of the existing TLW website, apps and guidedbook.	10,000
	Total	780,000
	Contingencies	78,000
	Total	858,000
	VAT	171,600
	Total	1,029,000

JU 21/9/15



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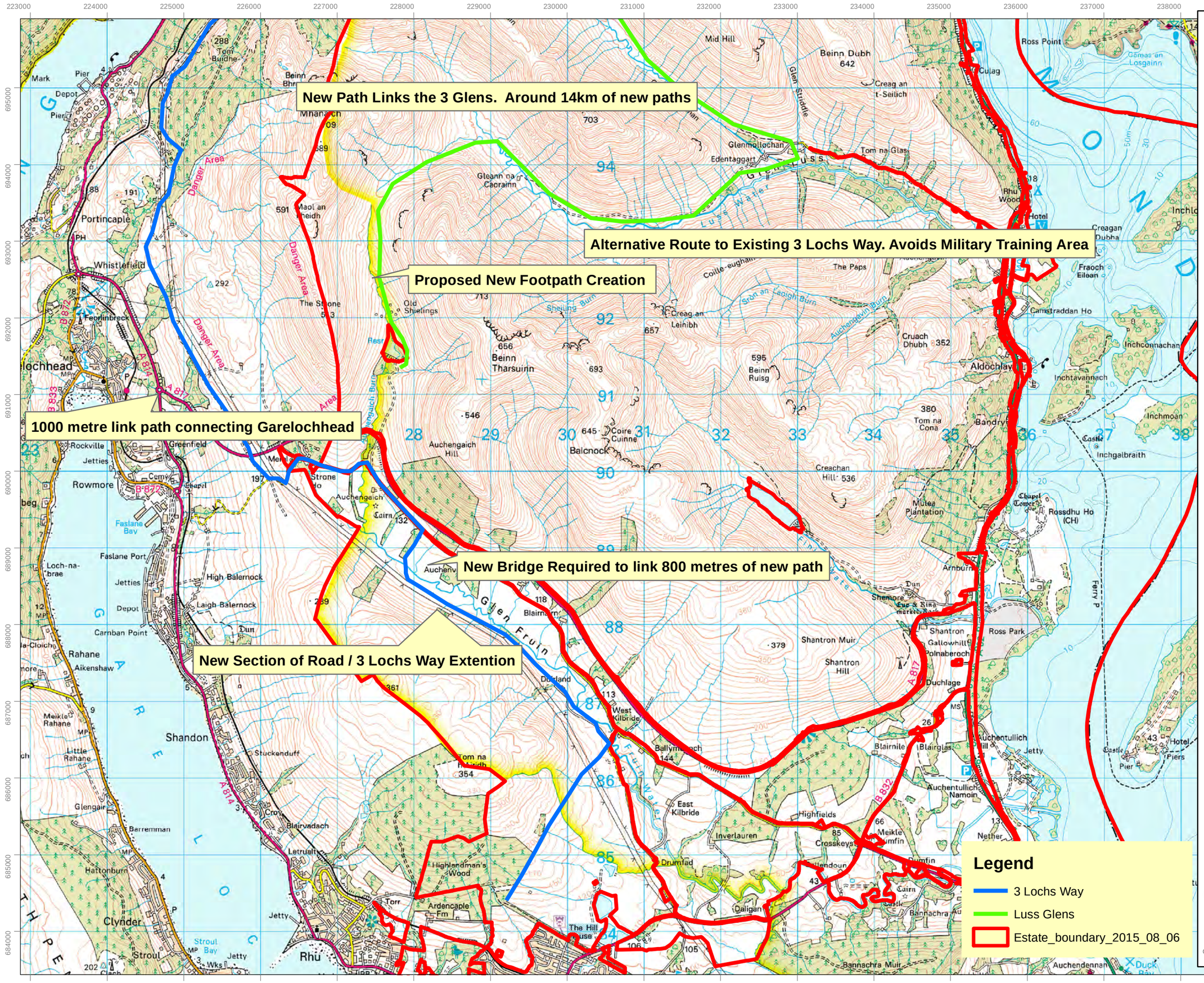
Arden, Argyll, G83 8RH
Tel: 01389 713 100



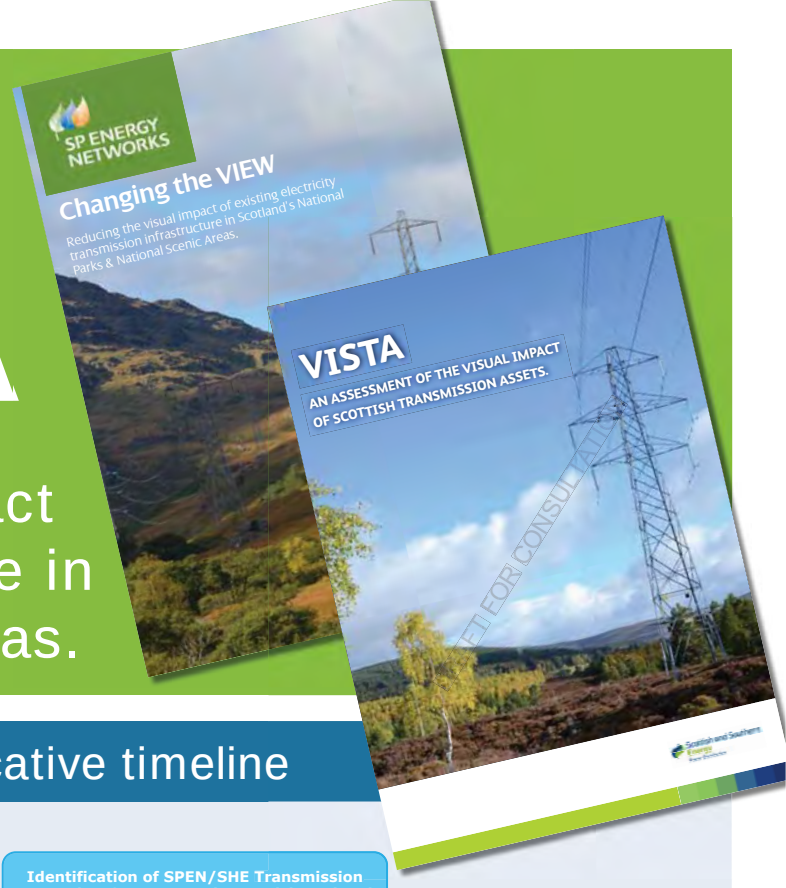
LUSS ESTATES COMPANY

Estate Office, Arnburn,
Arden, Argyll, G83 8RH
Tel: 01389 713 100

Appendix 5
Stage 2 – Stakeholder Consultation Information Boards

Changing the VIEW & VISTA

Initiatives to assess and reduce the visual impact of existing electricity transmission infrastructure in Scotland's National Parks & National Scenic Areas.



Introduction

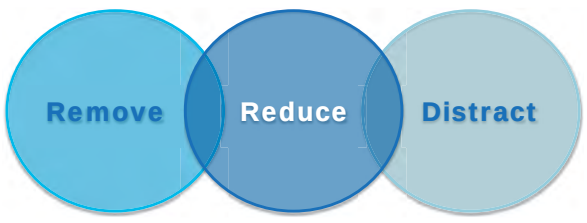
The VIEW and VISTA initiatives are seeking to access a share of a £500 million fund available to UK transmission operators, and administered by the electricity industry regulator OFGEM, which is intended to mitigate or positively enhance the visual impact of pre-existing transmission infrastructure within the UK's most protected and highly valued landscapes.

Core aims of VIEW & VISTA

- To identify visual and landscape impacts arising from existing transmission infrastructure in designated areas (National Parks and NSAs).
- Develop projects that achieve the maximum level of visual/ landscape enhancement or mitigation of impacts.
- Utilise a partnership approach to develop projects with the greatest benefits.
- Use innovative thinking to deliver projects that have also considered wider benefits (environmental, social, economic) beyond visual impact mitigation.

What will mitigation look like or consist of?

Three key principles of mitigation:



Feasibility of mitigation
- High level internal technical review
- High level indicative costing
- Rating effectiveness of mitigation

Hard engineering options

- Undergrounding of overhead transmission lines.
- Realignment of transmission lines.
- Substitution with different pylon types (e.g. lower height designs).

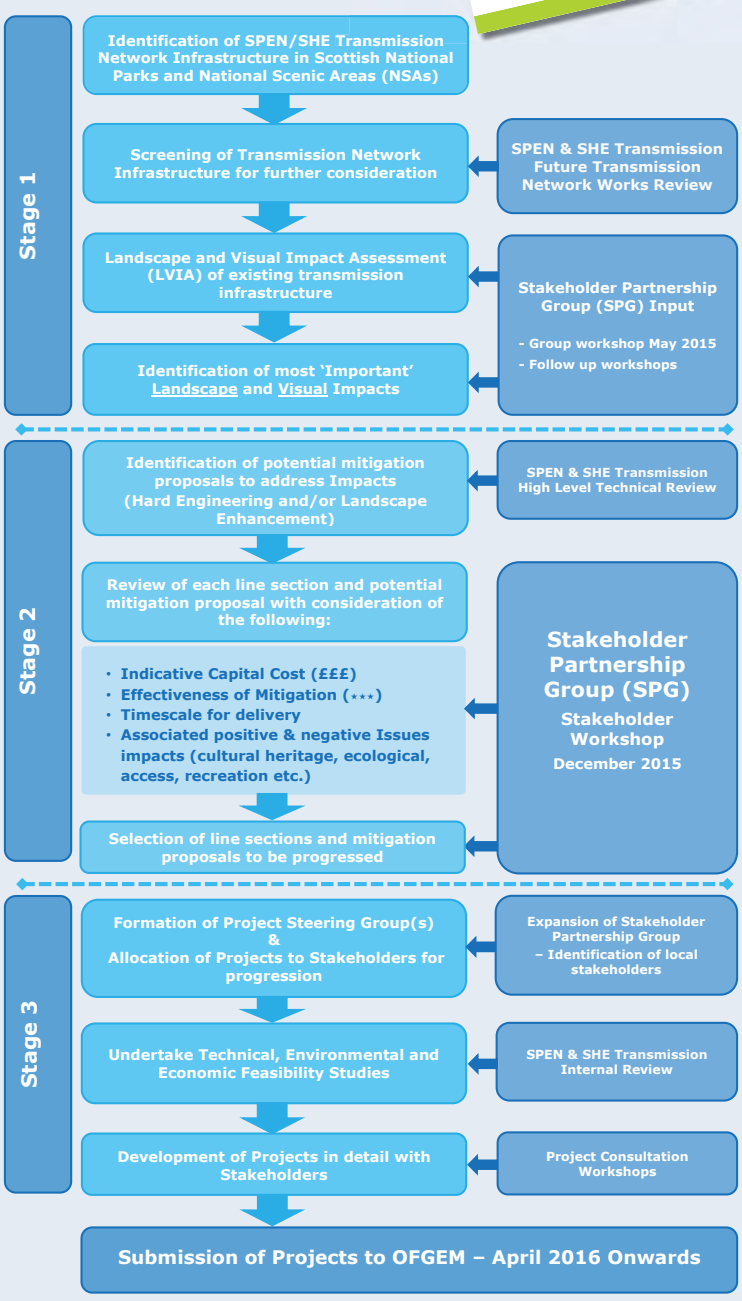
Soft landscape options

- Tree planting or other forms of screening where it might be feasible to mitigate impacts on visual receptors at specific viewpoints/routes.
- Enhancements to the wider landscape that are in line with other objectives and where such measures might feasibly mitigate landscape and visual impacts.

New installation options

- Introduction of a new installation/intervention to 'focus' or 'distract' from the impacts.

Indicative timeline



How can you get involved?

SP Energy Networks (SPEN) Visual Impact of Existing Wirescape (VIEW) Project

VIEW

www.spenergynetworks.co.uk/pages/view_project.asp

Email: view@spenergynetworks.co.uk

Scottish Hydro Electric Transmission Visual Impact of Scottish Transmission Assets (VISTA)

VISTA

www.ssepd.co.uk/vistaconsultation/

Email: vista@sse.com

Within the Loch Lomond and The Trossachs National Park Scottish Power Energy Networks (SPEN) and Scottish Hydro Electric Transmission (SHE Transmission) are working collaboratively to ensure their approaches are aligned and complimentary.

LUC

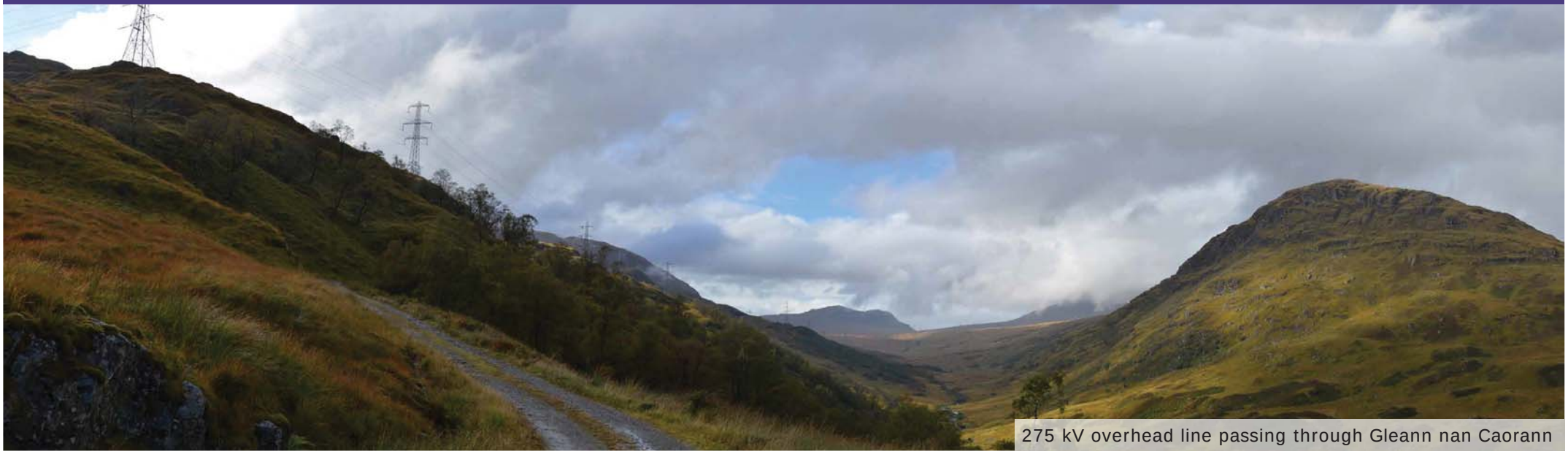
www.landuse.co.uk

line section

Loch Lomond and the Trossachs National Park

YW.1

Gleann nan Caorann



275 kV overhead line passing through Gleann nan Caorann

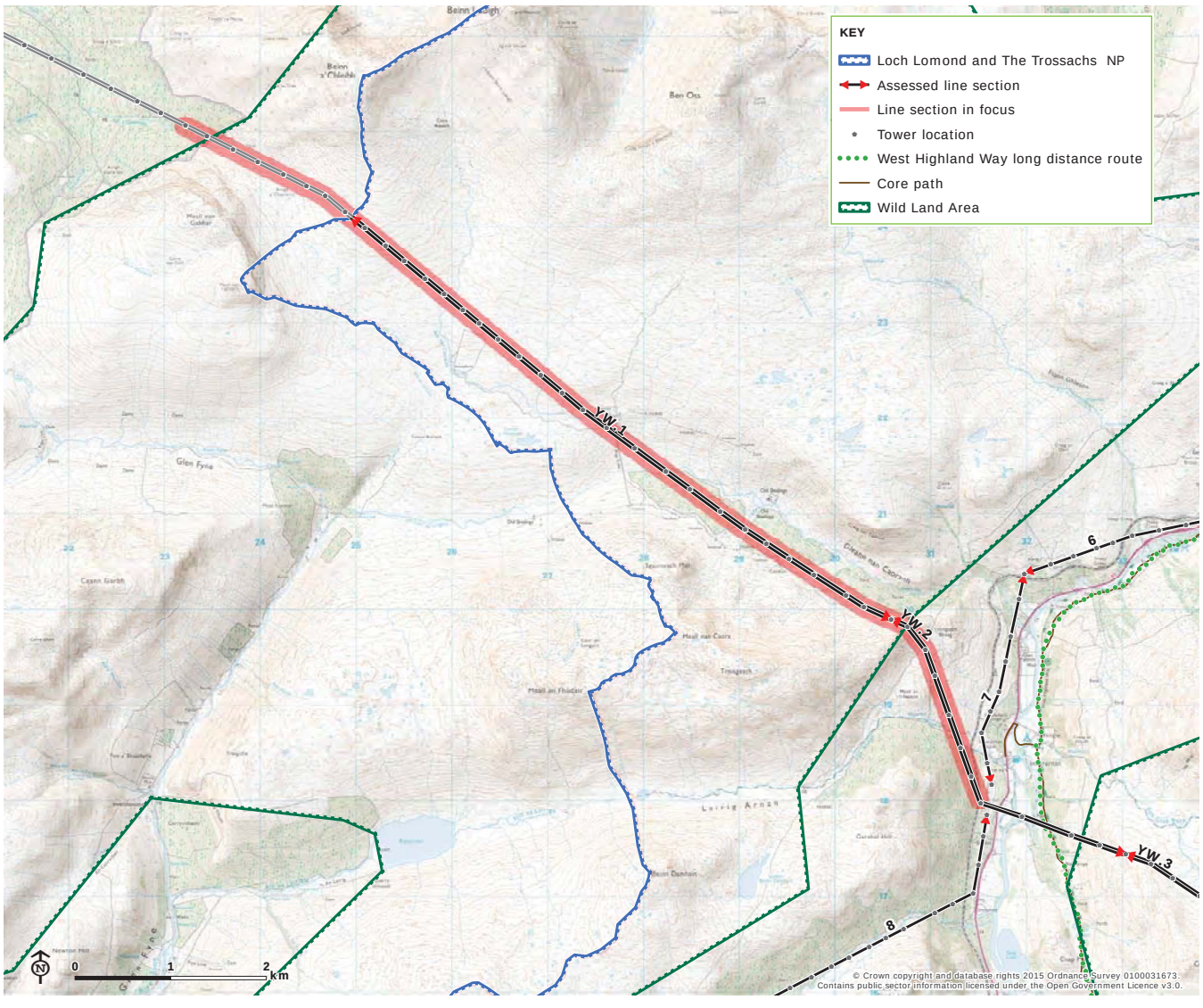
Landscape and visual context

This section of overhead line runs between Troisgeach Bheag, a rugged summit above Inverarnan (at the northern end of Loch Lomond), north west along the upper sides of Gleann nan Caorann to the edge of the National Park boundary south of the Munro, Ben Lui (1130m AOD). The line passes along the upper sides of the glen in a relatively straight line, crossing heather moorland and semi-natural grassland, and also semi-natural woodland at the south eastern end of the section. The area is remote, and accessible only via farm / transmission access tracks.

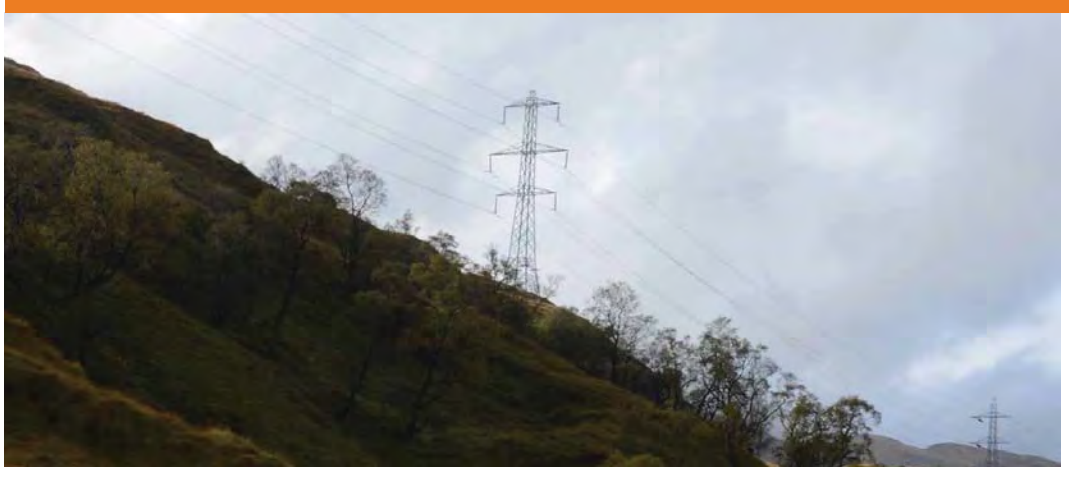
Landscape and visual impacts

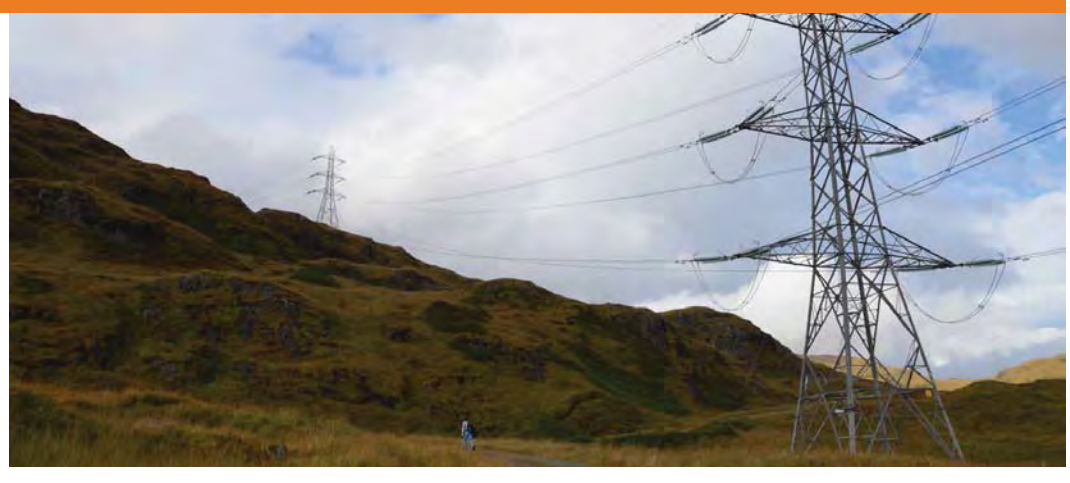
The line is generally well accommodated due to the large scale nature of the landscape and simple land cover of moorland. On more elevated ground the pylons are incongruous with the skyline formed by rocky hill slopes, and detract from the overall sense of wilderness and remoteness, although other man-made elements are present in this glen e.g. tracks, hydro-electric infrastructure, forestry. Overall the landscape impact is **High**.

The line is visible in close proximity views from the track/path which runs in parallel for most of its length, resulting in a high visual impact, however few walkers are anticipated to use this route. There is also visibility from Ben Lui, where the pylons are visible mainly against a moorland backcloth, and at a greater distance. Overall there is a **Medium** visual impact.



Mitigation proposals





Undergrounding — A

Undergrounding of 12 km section of overhead line through upper reaches of Gleann nan Caorann south of Ben Lui, from edge of National Park boundary to Inverarnan Substation.

Landscape enhancement — C

Extension of planting of native trees (i.e. Scots Pine) and regeneration of overgrazed vegetation along the corridor of the overhead line and parallel access track towards the southern footslopes of Ben Lui.

SP ENERGY NETWORKS®

LUC

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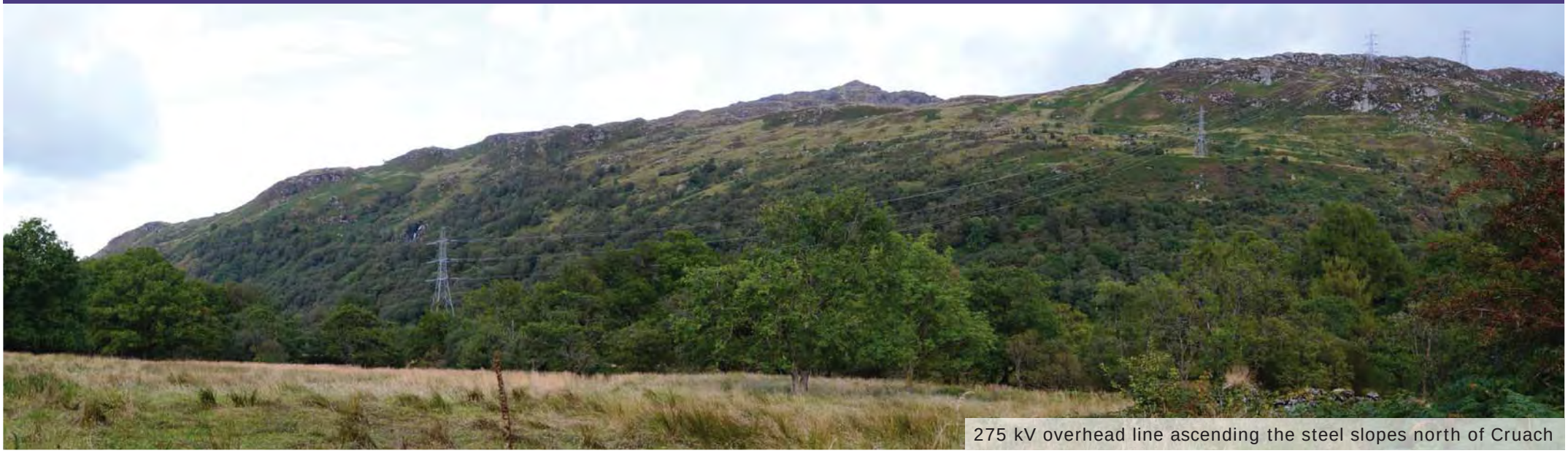
line section

Loch Lomond and the Trossachs National Park

YW.2

Inverarnan



275 kV overhead line ascending the steel slopes north of Cruach

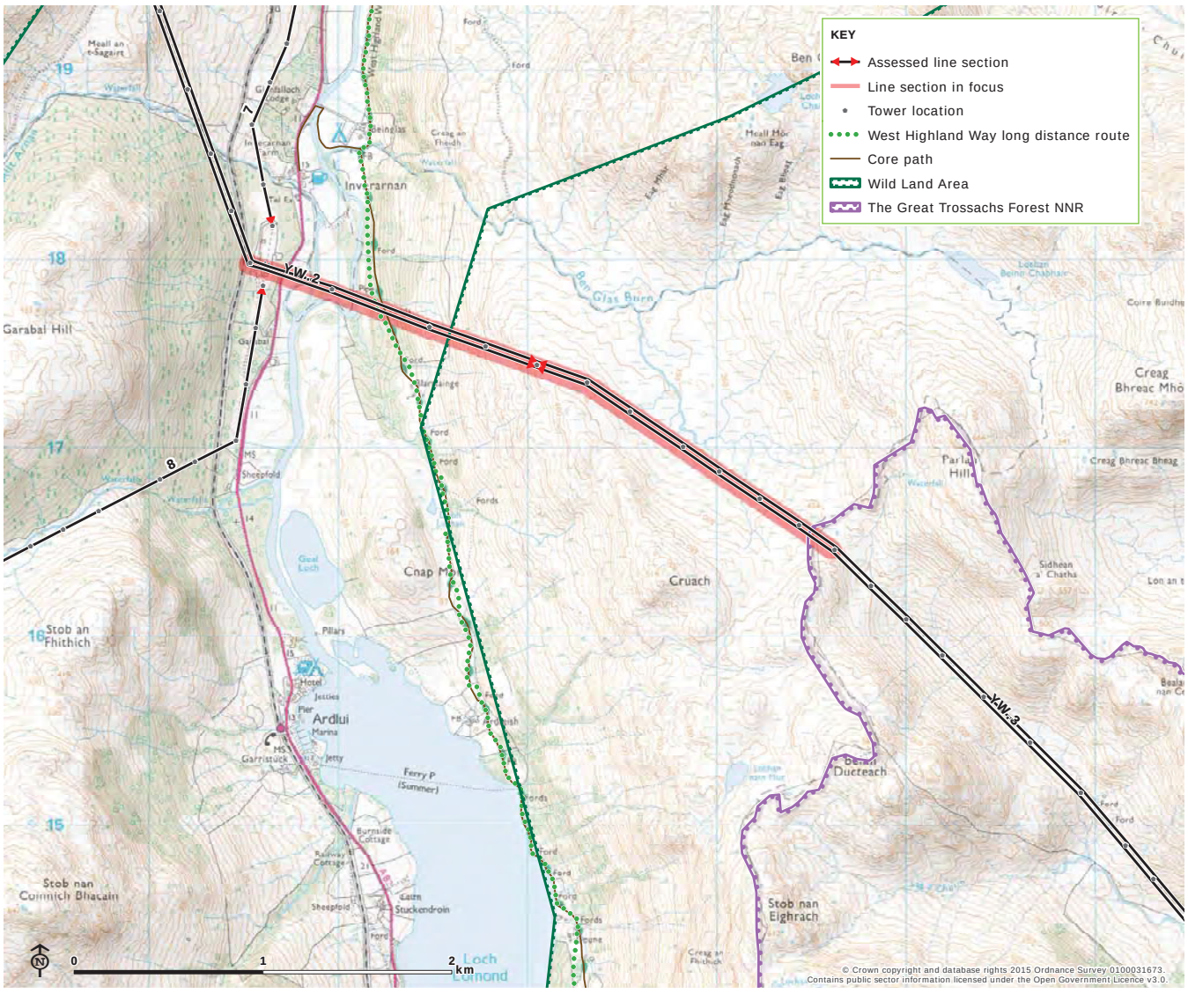
Landscape and visual context

The 275 kV line crosses the southern end of Glen Falloch, a dramatic, steep sided upland glen between elevated summits, with waterfalls cascading to the glen floor. The line falls from approximately 380 m AOD on the eastern side of the glen, to 10 m AOD in the glen floor, before rising again to approximately 250 m AOD on the western side of the glen at Troisgeach Bheag. The line crosses rugged rocky outcrops and moorland on the upper glen sides, and pasture, broadleaved woodland, the River Falloch and A82 trunk route on the lower glen sides and glen floor. Other infrastructure including 132 kV overhead lines also cross the glen.

Landscape and visual impacts

The scale of the pylons is generally accommodated within the large scale glen, particularly those located across the settled glen floor which contains small settlements and the A82 road corridor along the River Falloch. When ascending the eastern slopes of the glen the pylons are more visible and incongruous with the wild and remote qualities that extend into the mountainous upland areas. Overall the landscape impact is **Medium**.

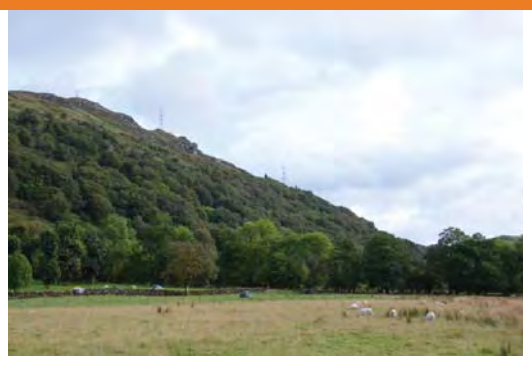
This section of overhead line is accommodated in the settled glen floor, and is in scale with other elements such as trees and farmsteads, although some visual conflicts occur, particularly with the 132 kV overhead lines. On the rugged ridges above the glen the pylons diminish the scale of the hills and detract from the scenic backdrop to the glen. Overall the visual impact is **Medium**.



Mitigation proposals

Undergrounding A

Undergrounding of 9 km section of OHL from Inverarnan substation eastwards over the ridge north of Cruach and into Glen Gyle.



Alternative pylon design B

Alternative/bespoke pylon tower design for overhead line between Inverarnan Substation and the rugged ridge of Cruach to the east (i.e. Icelandic marching men pylon concept design).

Landscape enhancement C

Further landscape enhancement around Inverarnan substation, along Great Glen Way and potentially tied into A82 upgrading.

New installation D

Creation of a sculptural incident or installation, in a similar vein and tying into the Scottish Scenic Routes initiative.

SP ENERGY NETWORKS

LUC

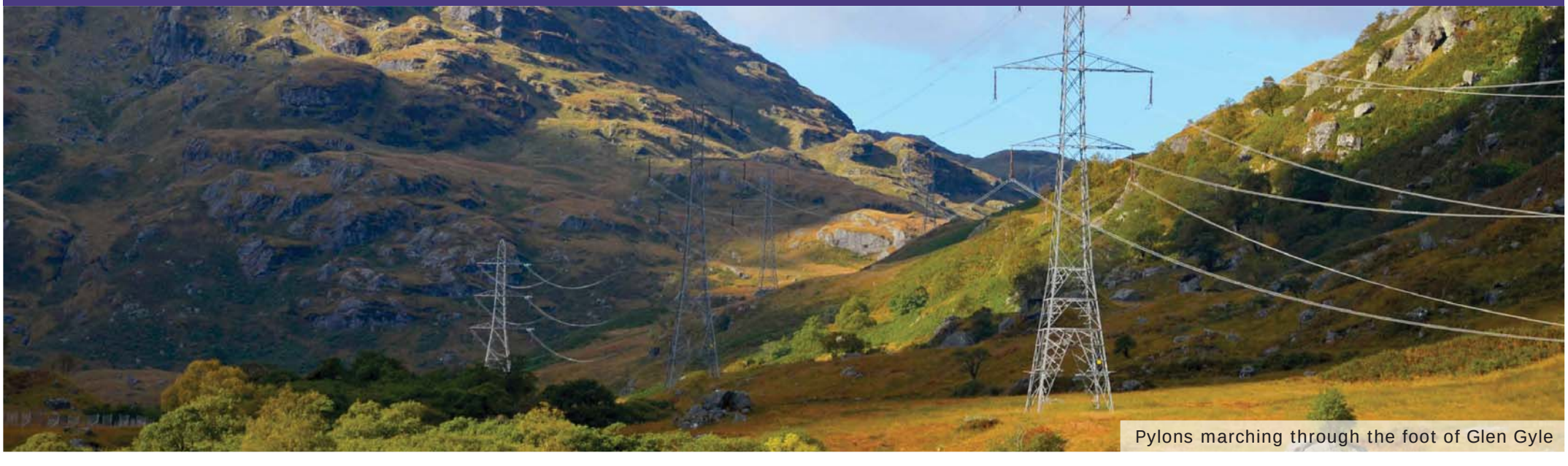
www.landuse.co.uk

line section

Loch Lomond and the Trossachs National Park

YW.3

Glen Gyle



Pylons marching through the foot of Glen Gyle

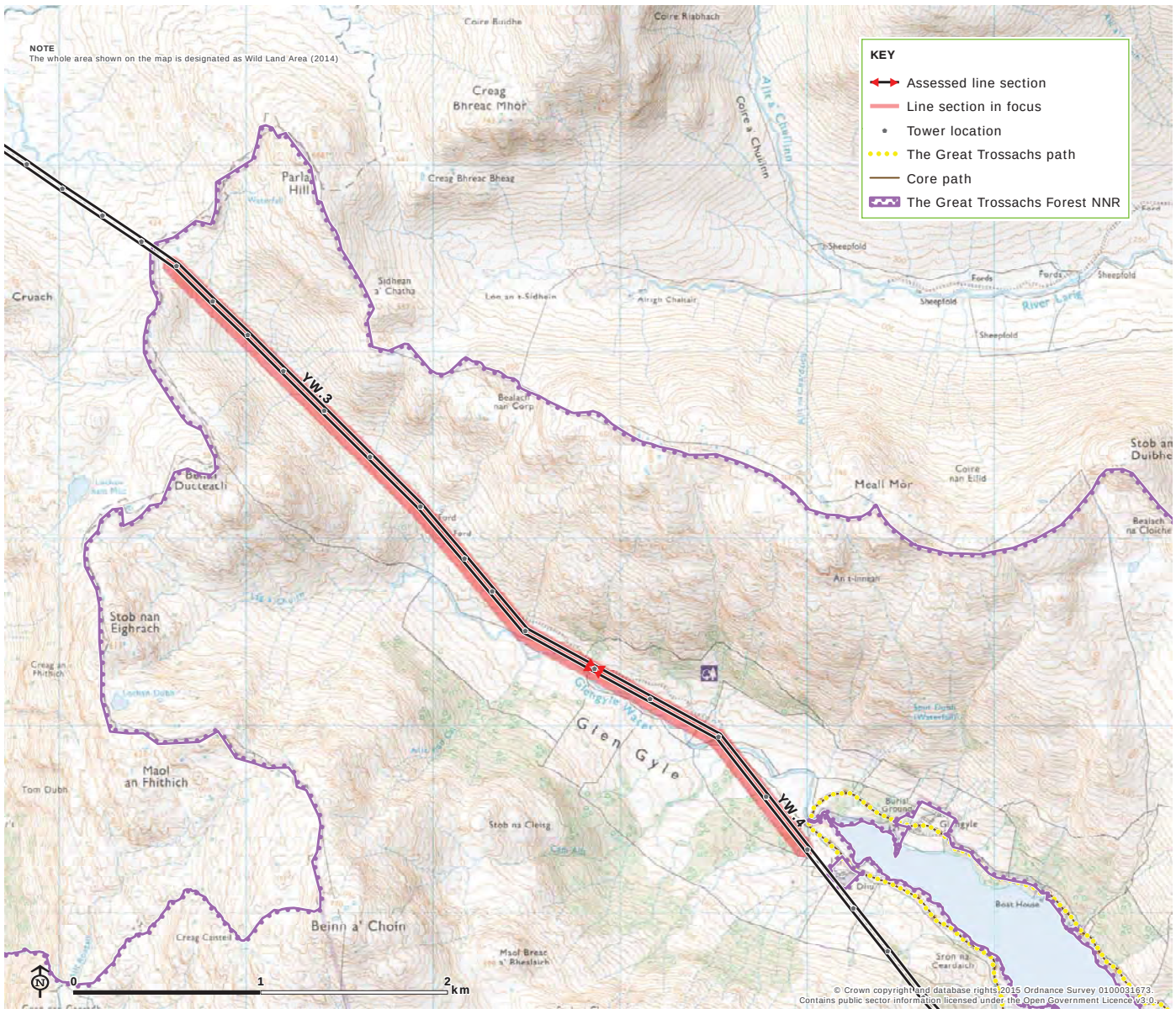
Landscape and visual context

This section of overhead line runs through Glen Gyle, a dramatic, steep sided upland glen enclosed by the rugged peaks of Beinn a Choin (770 m AOD) and Beinn Chabhair (933 m AOD), above and to the east of Loch Lomond. The overhead line crosses an upland moorland plateau above Glen Falloch before heading down Glen Gyle, running in parallel with the Glengyle Water. The upper part of the glen is relatively remote and accessible only via a maintenance track, which is also a core path.

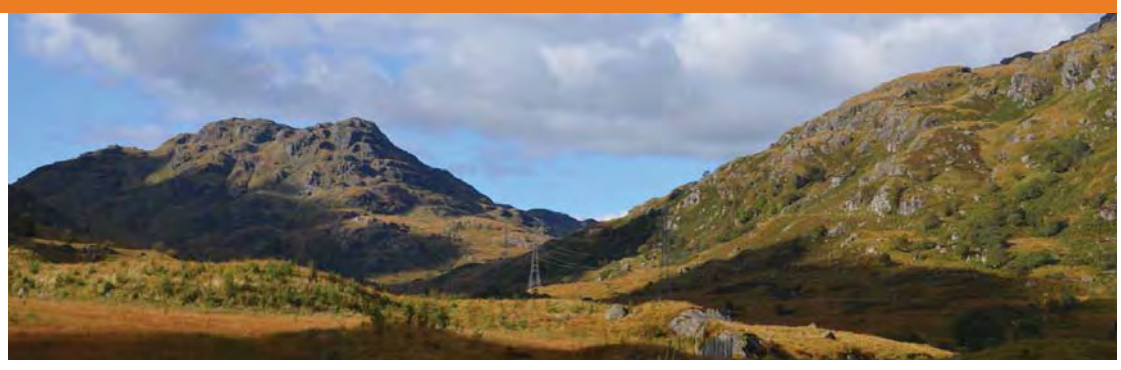
Landscape and visual impacts

The pylons are generally well accommodated within this large scale landscape, particularly where sited on lower slopes and backclothed by the rugged hills that enclose the glen, however these man-made structures substantially detract from the overall sense of remoteness and wilderness and the line has an adverse impact on the Ben More - Ben Ledi Wild Land Area. Overall the landscape impact is **High.**

The line is visible in close proximity views from the track (also a core path), which runs in parallel for most of its length. There is also visibility from nearby hill summits including Ben Glas and the pylons are visible on the skyline where they pass over the ridge at the head of Glen Gyle before descending westwards towards Inverarnan. Overall the visual impact is **High**.



Mitigation proposals



Undergrounding — A

Undergrounding of 275 kV overhead line through Glen Gyle to remove towers visible within the glen and from within the wider Ben More - Ben Ledi WLA.

Landscape enhancement — B

Planting of native trees (i.e. Scots Pine) in line with the Great Trossachs Forest initiative. Regeneration of overgrazed vegetation along the corridor of the OHL.

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line section

Loch Lomond and the Trossachs National Park

YW.4

Stronachlachar, Loch Katrine

Stronachlachar Pier on Loch Katrine

Landscape and visual context

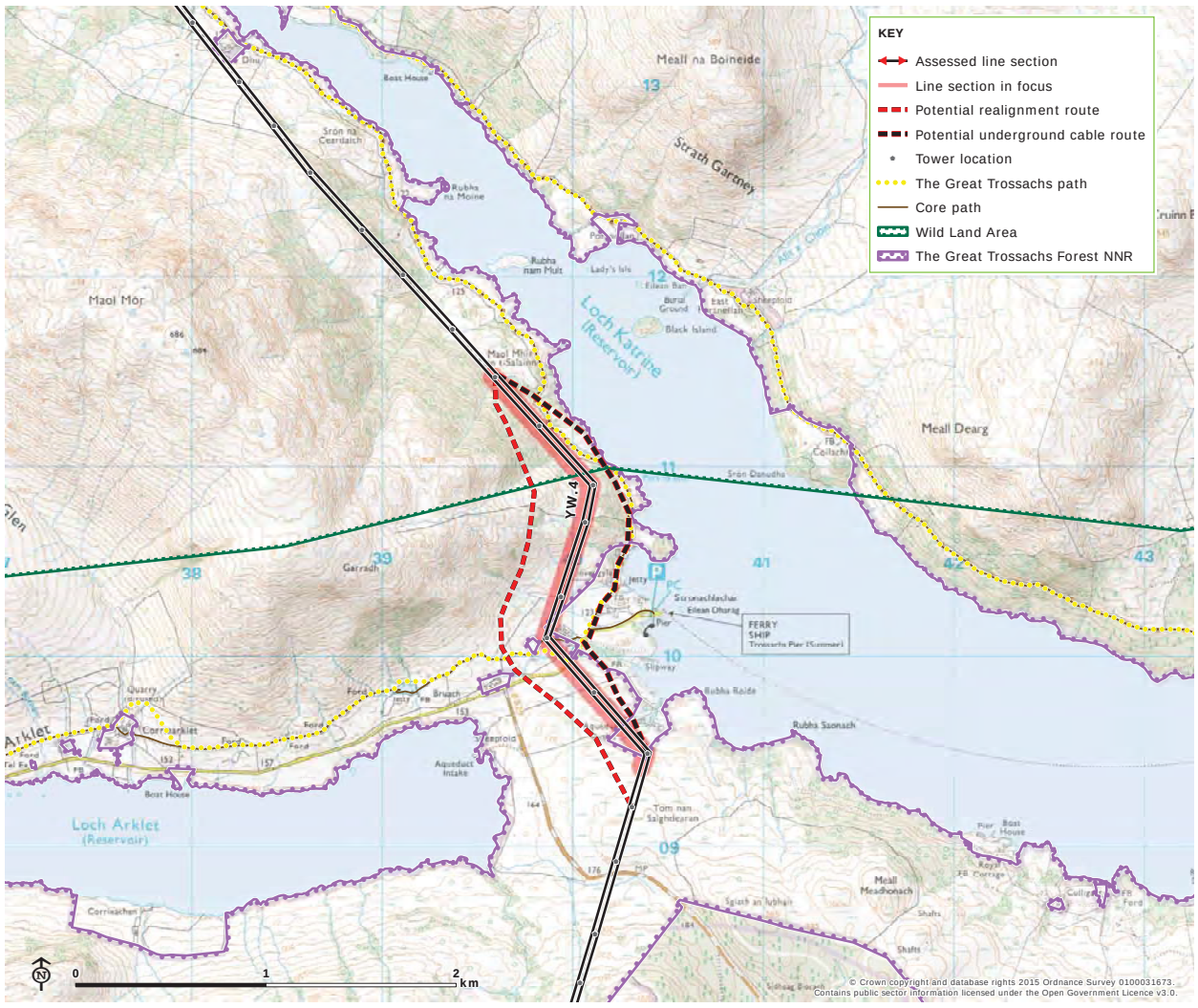
This section of the 275 kV overhead line passes along the steep slopes above the western edge of Loch Katrine between Glen Gyle and the small settlement of Stronachlachar, where it runs parallel to the Great Trossachs Path which skirts the loch edge.

Semi-natural and ancient woodland fringes the shores of the loch. The line crosses high ground above Stronachlachar before heading south towards Loch Ard Forest, passing an aqueduct outlet waterfall and crossing the B829.

Landscape and visual impacts

The pylons diminish the scale of the hills, particularly around Stronachlachar, and detract from some of the special qualities attributed to the Loch Katrine area. Overall there is a **High** landscape impact.

Close views of the pylons are available to sensitive receptors, including recreational users of the Great Trossachs Path, residential receptors on the western shores of the loch and visitors to this key tourist destination. From Loch Arklet to the west, visibility reduces with distance and the pylons do not detract from key views across the loch. Overall there is a **High** visual impact.



Mitigation proposals

Undergrounding A

Undergrounding of approximately 2 km of 275 kV overhead line to remove towers visible above headland near Stronachlachar, from Stronachlachar Pier and café, Great Trossachs trail and nearby residential properties.

Re-routeing B

Minor re-route of approximately 2km of 275 kV overhead line to remove towers visible above headland near Stronachlachar, from Stronachlachar Pier and café, Great Trossachs trail and nearby residential properties.

Landscape enhancement C

Catchment and green infrastructure improvements (native tree and shrub planting) along corridor of existing 275 kV overhead line to screen and filter localised views.

New installation D

New installation or attraction at Stronachlachar, or on small headland to north, to focus views along Loch Katrine away from existing infrastructure.

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line section

Loch Lomond and the Trossachs National Park

YW.6 - YW.7

Loch Ard Forest Central & South

275 kV overhead line passing through the Loch Ard Forest

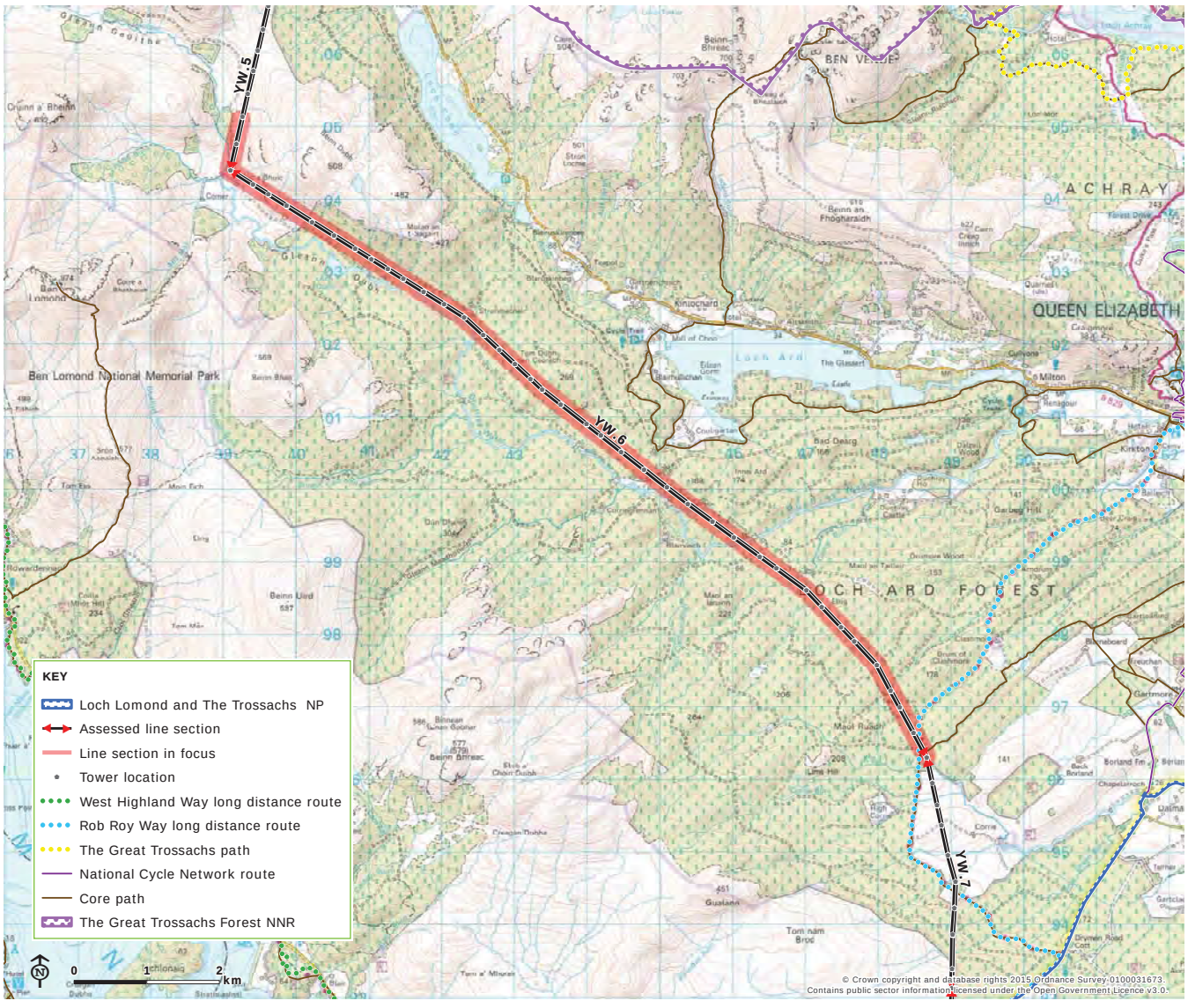
Landscape and visual context

This section of the overhead line passes through Loch Ard Forest, a rolling, forested plateau crossed by small burns e.g. the Duchray Water. The forest is relatively inaccessible, except for forestry / water board tracks and mountain biking trails. There are some areas of semi-natural and planted broadleaved woodland e.g. Blairvaich Wood, and some heather moorland. The forest has a rugged backdrop of hills to the south and west, including Beinn Bhreac (579 m AOD) and Ben Lomond (974 m AOD). The Rob Roy Way crosses under the line south of Drum of Clashmore at the south eastern end of the section.

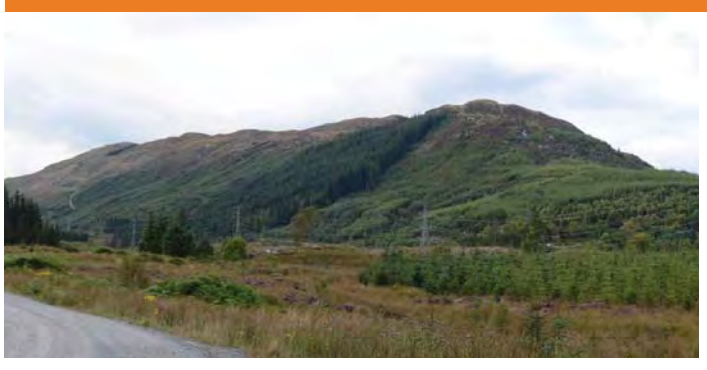
Landscape and visual impacts

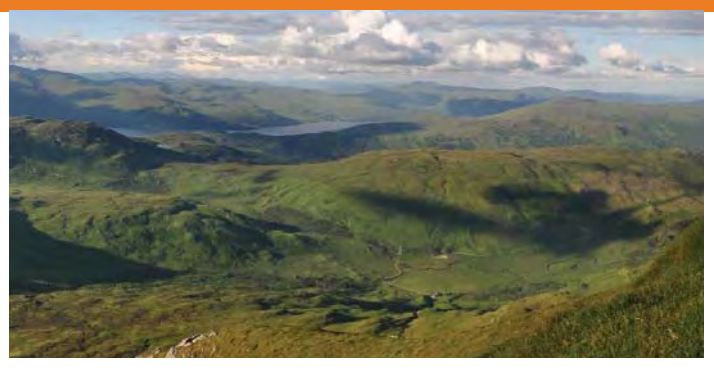
The pylons appear out of scale with the coniferous plantations and diminish the scale of the rugged backdrop of hills including Ben Lomond and other landmark hills. In the south east the pylons appear out of scale with other features e.g. the aqueducts and small scale knolls and ridges, but are sited lower within the forest and are therefore better integrated. Overall the landscape impact is **Medium**.

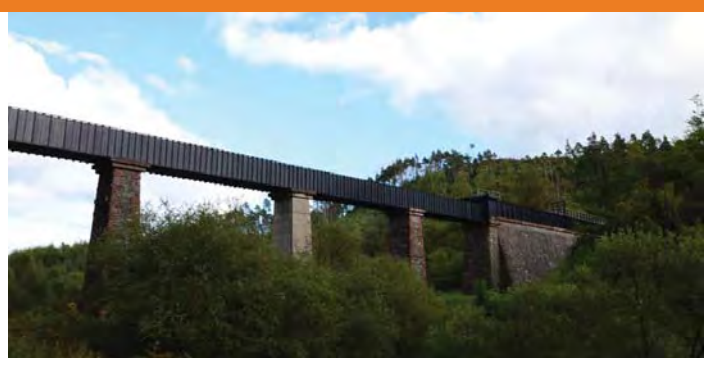
In the south east, views of the line are restricted to glimpses from forest tracks. Elsewhere the forestry provides effective screening of the line, however where the forest track is more elevated and the forest structure more open prolonged views of the line are possible, including from the Rob Roy Way. This section of line detracts from views of Ben Lomond. Overall the visual impact is **High**.



Mitigation proposals







Landscape enhancement

A

Restructuring of forestry, tied into a management plan and access strategy for the Loch Ard Forest in order to maintain and improve screening of the overhead line provided by forestry and deciduous woodland. Coupled with improvement of access (circular routes for walking/mountain biking) and softening of wayleaves through the forest. Possible access route along the linear route of the Loch Katrine water project (aqueduct/pipeline) – the 'Utilities Spine route' back to Glasgow / potential cultural heritage link/new long distance footpath/cycle route with linked nodes along route (50 years. of Cruachan celebration).

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line section

Loch Lomond and the Trossachs National Park

YW.8

East of Drymen

The 275 kV overhead line seen from the Rob Roy Way/NCR7

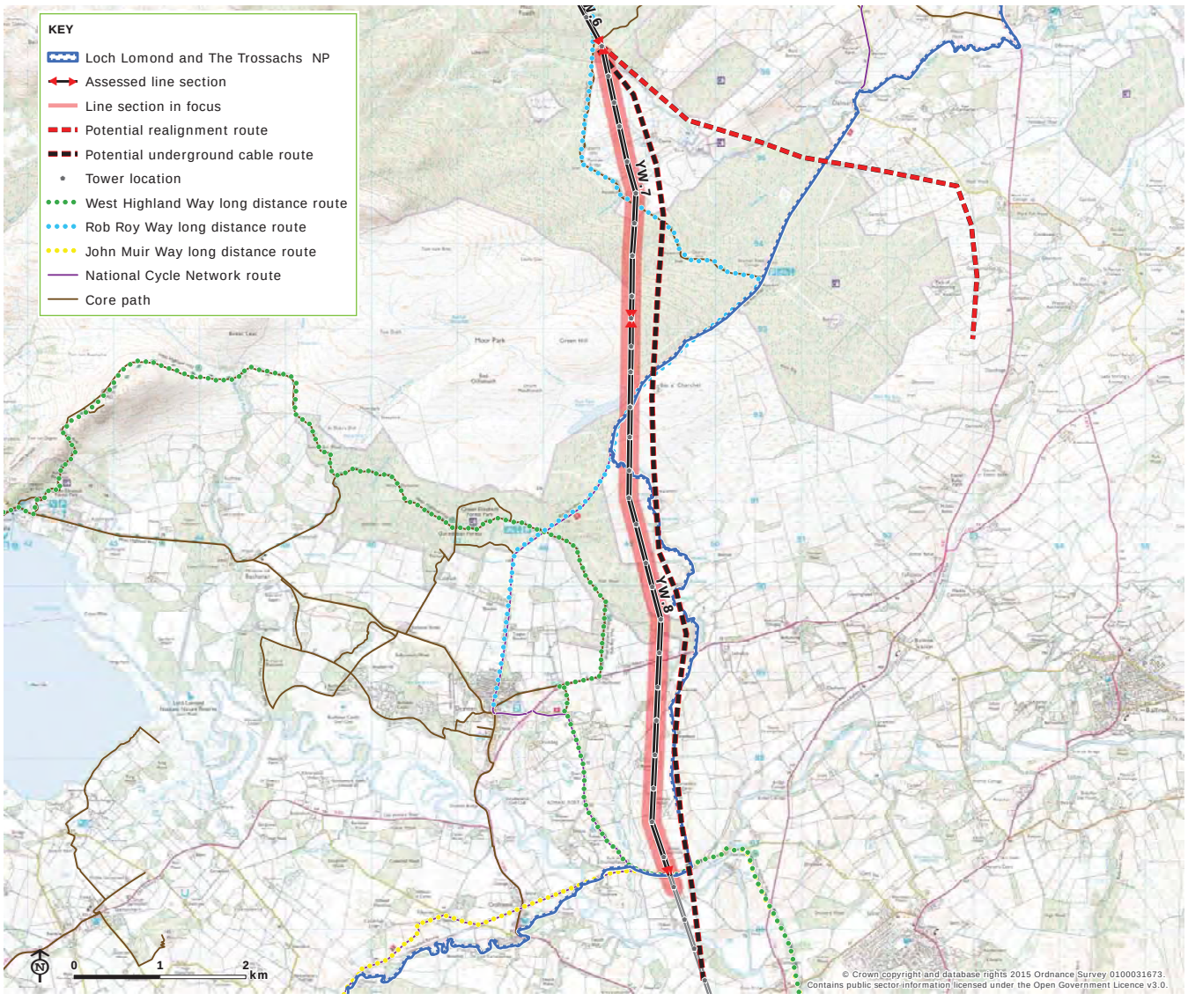
Landscape and visual context

This most southerly section of the 275 kV line starts west of Upper Gartness where the line crosses a minor road (part of the West Highland Way and John Muir Way) into the National Park boundary. The line runs parallel with the National Park boundary across rolling farmland and narrow wooded valleys for approximately 2 km, before it crosses the A811. From here the line crosses through farmland on the edge of coniferous forestry (some recently felled). The line crosses briefly out of the National Park south of Muir Park Reservoir, before passing over a minor road (part of the Rob Roy Way / National Cycle Route 7). The overhead line crosses the ridge line between Green Hill (270 m AOD) and Bàt a' Charchel (230 m AOD) before descending into the forest around Corrie.

Landscape and visual impacts

The open plateau landscape north of the A811 is better able to accommodate the line than the smaller scale, farmed landscape to the south, and the smaller scale farmed landscape around Corrie. The line is generally in keeping with the scale of the landscape, except where the pylons cross the Parallel Ridges LCT and appear to dominate the landscape. Overall the landscape impact is **Medium**.

This section of line has a widespread visual influence, with the network of roads providing some very close views, including from the West Highland Way, Rob Roy Way and John Muir Way. The area is a gateway to the National Park from the east, and the line is also visible from the A811, the main route into the park. Overall the visual impact is **High**.



Mitigation proposals

Undergrounding A

Undergrounding of approximately 9 km of 275 kV overhead line from the south east corner of the National Park eastwards towards Flanders Moss and the B835, reducing visibility from the West Highland Way, Rob Roy Way, John Muir Way and the NCR7.

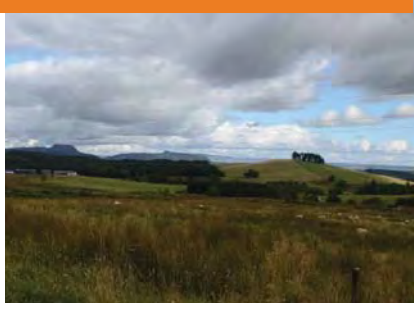
Re-routeing B

Minor re-route of approximately 8 km of 275 kV overhead line from the south east corner of the National Park eastwards towards Flanders Moss and the B835, reducing visibility from the West Highland Way, Rob Roy Way, John Muir Way and the NCR7.

Landscape enhancement C

Landscape improvements to improve the integration of the overhead line in the area of the West Highland Way/John Muir Way/Rob Roy Way/NCR7.

Development of forest management strategy/ community woodland project which responds to the presence of the overhead line in providing long term permanent screening and recreation opportunities.



New installation D

Art installation on the West Highland Way/John Muir Way/ Rob Roy Way/NCR7, located to distract viewers from the presence of the overhead line.

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line section

Loch Lomond and the Trossachs National Park

CL / CK1

Glen Fruin

Parallel 132 kV overhead lines running alongside core path through Glen Fruin

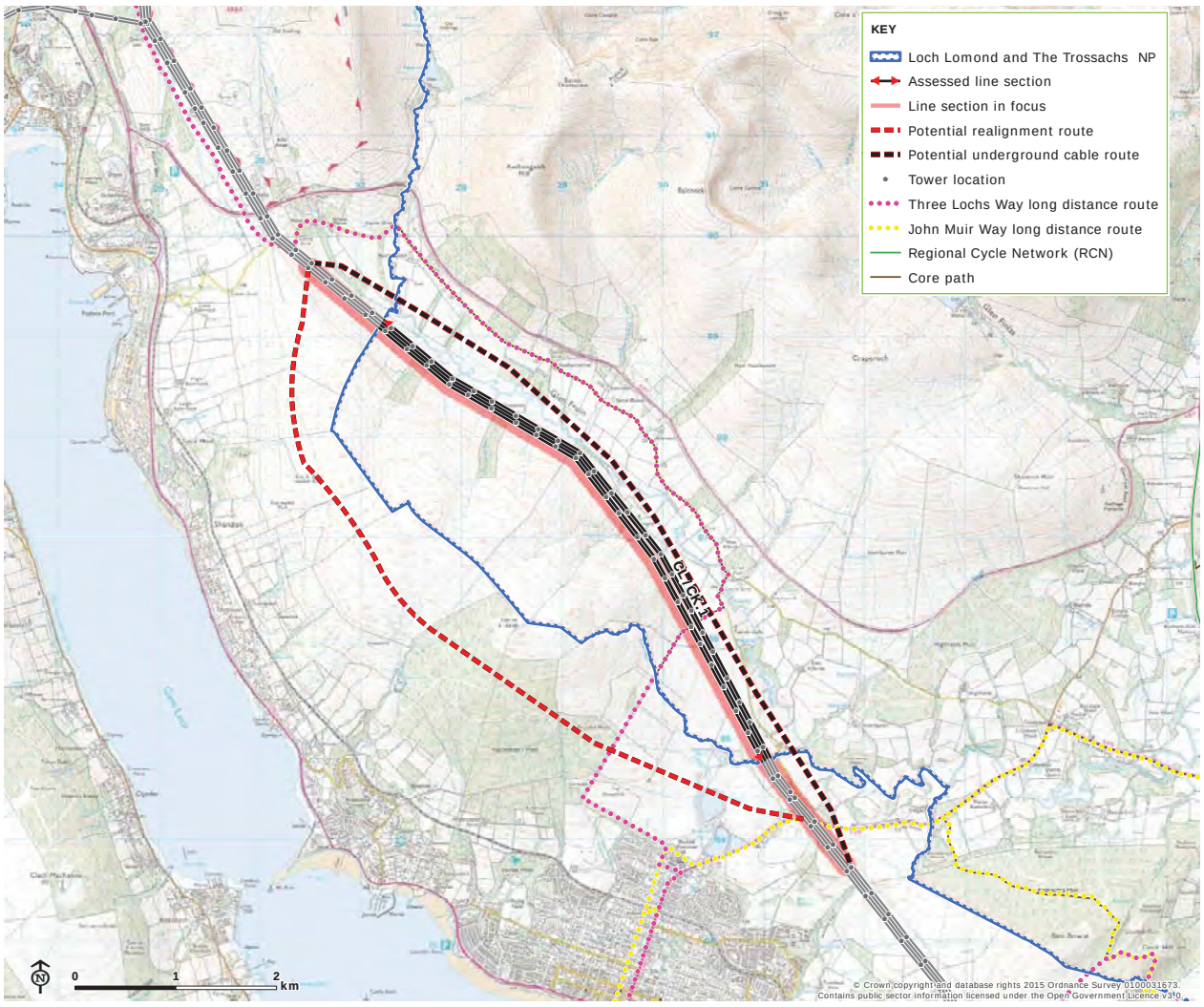
Landscape and visual context

Two parallel overhead lines run through the southern edge of the National Park at Glen Fruin – a broad valley with a flat floodplain rising to low hills. A minor road providing access to local farmsteads runs along the valley floor, parallel to the meandering Fruin Water. The A817 also runs through the glen, on the upper valley sides. The line crosses pastoral fields which are enclosed by dry stone walls. Traditional farm buildings and groups of mature broadleaved trees are scattered across the farmland. The line skirts the edge of two straight edged conifer plantations at its north western end.

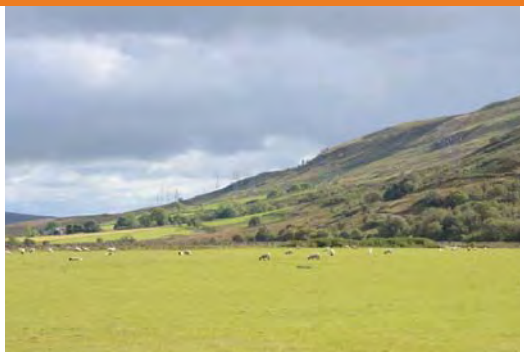
Landscape and visual impacts

Glen Fruin is an intact farmed upland glen, but does not display many of the special qualities of the wider National Park. The lines are well integrated with the farmed and forested landscape, matching the scale of nearby conifer plantations and groups of mature trees around farmsteads. The lines do however form a key linear feature within the glen, and overall the landscape impact is **Medium**.

The parallel lines are highly visible from the majority of the glen. Visual receptors include local residents, users of the minor road and A817, and walkers on the Three Lochs Way long distance footpath. The line is better integrated in the west, with more skylining and stacking occurring in the east. Overall the visual impact is **High** within the glen.



Mitigation proposals



Undergrounding A

Undergrounding of a section of both overhead lines through the National Park to appropriate terminal tower positions located outside the National Park boundary.

Re-routeing B

Re-routeing of 132 kV overhead lines outside of National Park boundary to the south.

Landscape enhancement C

Improvements along the Three Lochs Way long-distance path, including an alternative route inland through upper Glen Luss - including landscaping - wide scale planting in the glen, improvement to the appearance of the track.

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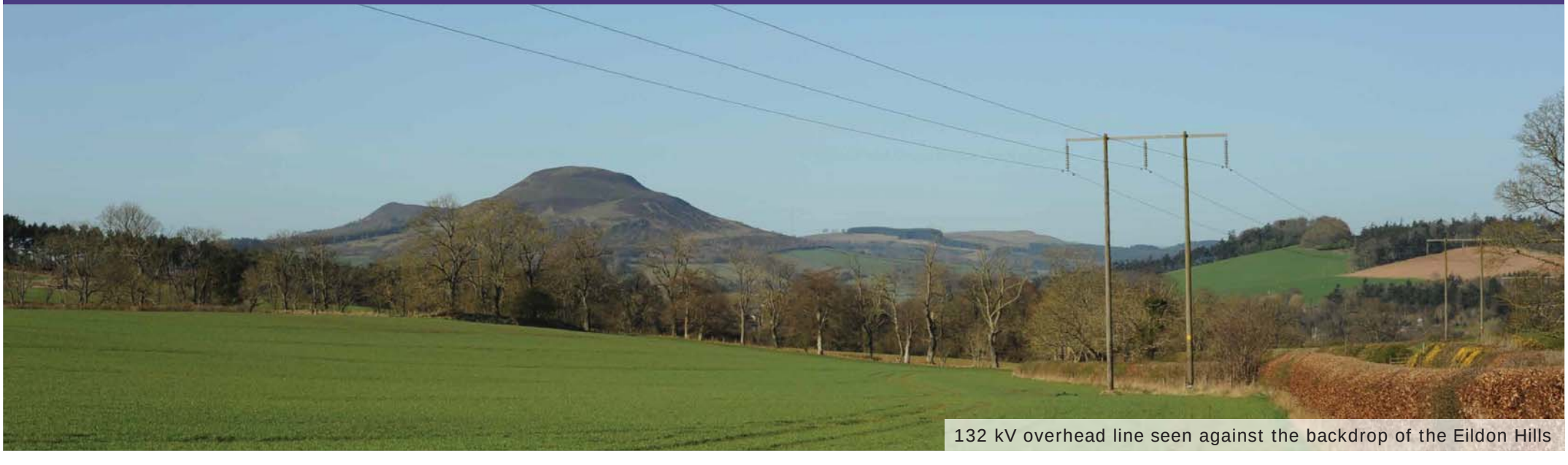
Eildon and Leaderfoot NSA

line section

AT / U / V

Leaderfoot Valley



132 kV overhead line seen against the backdrop of the Eildon Hills

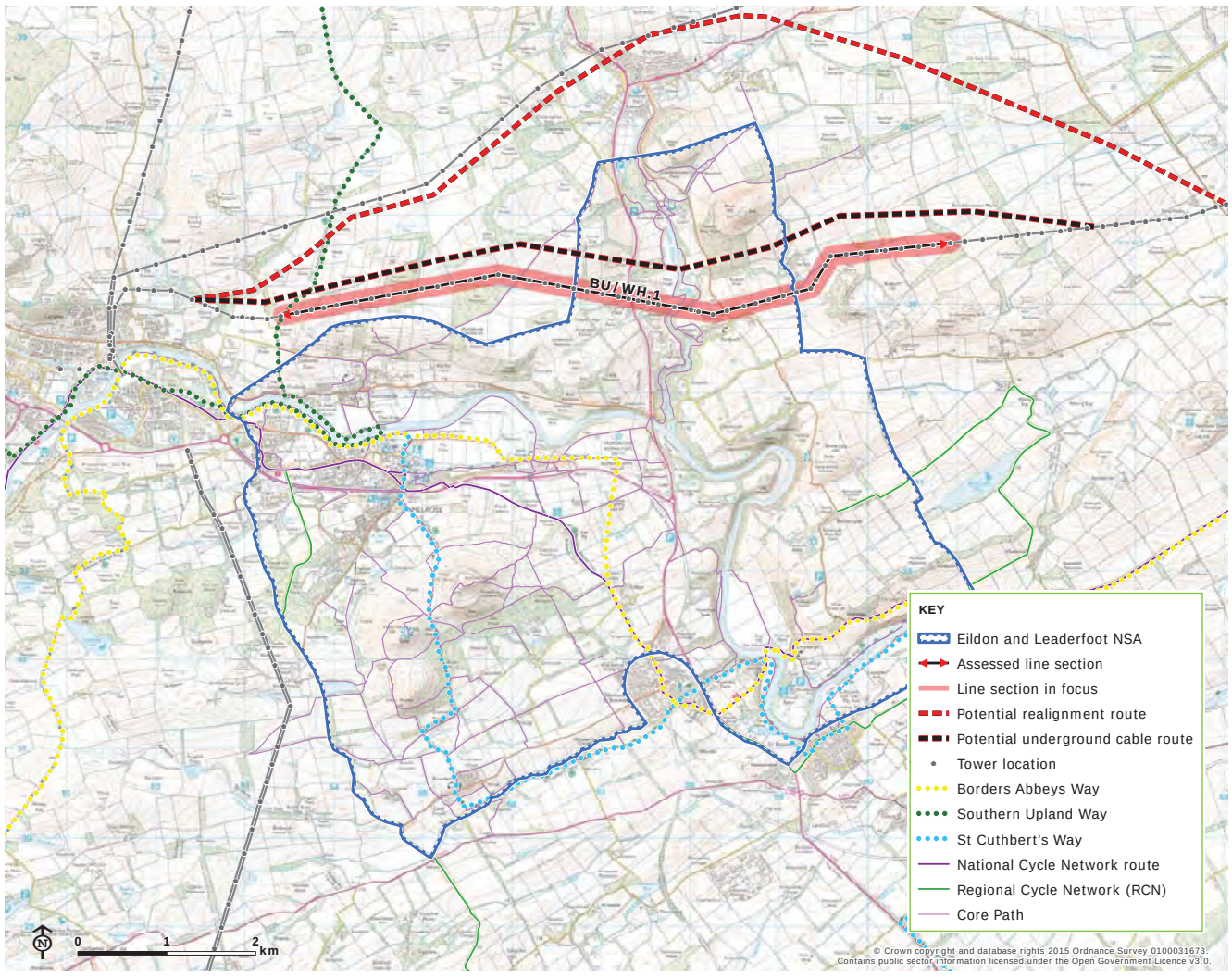
Landscape and visual context

One section of 132 kV overhead line crosses the valley of the Leader Water in the north of the National Scenic Area (NSA). A further two overhead lines are in proximity to the NSA, running parallel with the north and west boundaries. The valley of the Leader Water is contained by deciduous woodland with geometric blocks of coniferous woodland and enclosed farmland creating a relatively intimate scale landscape. The conical shaped landmarks of the Eildon Hills form the key focal point of views within and to the NSA, and offer long distance views of the two lines located outside the NSA boundary.

Landscape and visual impacts

The low vertical scale of the line crossing the NSA is generally well contained within the intimate farmland and valley landscape through which it passes. Overall the landscape impact is **Medium**.

Views of the lines are limited to those experienced within proximity, including from the Southern Upland Way to the north of the NSA. The A68 runs perpendicular to the overhead line west of the Leader Water, from where glimpsed views of the line are possible as it crosses the valley. Longer distance views of the lines outside the NSA are possible from the summits of the Eildon Hills, where the lines appear as a minor element in the view. Overall the visual impact is **Medium**.



Mitigation proposals

Undergrounding A

Removal of 8 km of existing overhead line and undergrounding (within the NSA).

Re-routeing B

Re-routeing of 8 km of existing overhead line along an alternative alignment to the north of the NSA.

Landscape enhancement C

Development of an Eildon and Leaderfoot NSA Management Strategy/Plan. The plan must include objectives linked to the mitigation of visual impacts associated with overhead line infrastructure, and a chapter on the topic (rationalisation of infrastructure, removal of clutter, future rerouting out of the NSA).

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Appendix 6
Stage 2 – Stakeholder Consultation Worksheets

Gleann nan Caorann

Line Section
YW.1

Mitigation Proposal & Description		Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Undergrounding** Undergrounding of 12 km section of overhead line through upper reaches of Gleann na Caorann south of Ben Lui, from edge of NP boundary to Inverarnan Substation	**£££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Identification of suitable cable corridor may be difficult; • Impacts during removal of existing infrastructure and construction may bring long lasting damage to wild land area; • Impacts on other heritage assets from undergrounding (biodiversity/ecology/cultural heritage); • Introduction of sealing end/terminal towers at start and end of underground section – identification of appropriate locations. • Other impacts of undergrounding, particularly peat; • Difficulty of finding a suitable cable corridor; • Heat from cables will impact on peat; • Hydrology issues from construction, operation and restoration; • Impact of access tracks; • Huge ecological impact; • Invasive; • Hydrological impacts and knock on effect for habitats; • Rocky terrain – technically difficult; • Long timescale for full restoration; • Would benefit fewer people; • Would Rock Cut and ground disturbance be manageable and restorable in this location? • Cost/disruption/associated impacts.	• Removal of man-made elements from Ben Lui Wild Land Area, delivering objectives of rewilding of Scotland's wild land areas; • Mitigation effective once implementation is complete. • Complements objectives of Wild Land Areas and National Park special qualities; • Wildness highly valued by walkers who do access the wider area; • As with YW.2, Where this crosses through Glen Falloch is very high profile to many tourists. Undergrounding of the section in the Glen could have great merit.	• Best Value: Very high capital cost – to mitigate relatively small section of overhead line; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015); • Operational constraints of the overhead line, due to the importance of Cruachan hydroelectric generation station within the wider SPEN network; • Mitigation of landscape and visual impacts associated with the adjacent hill track which runs in parallel with the overhead line may need to be undertaken for undergrounding works to be justified and fully effective; • Not good value for money; • Landowner retrospective planning application for tracks; • May be more benefit for communities elsewhere; • Overlap with Mountains and People project; • Undergrounding of prominent towers could result in benefit; however lower levels of public access enjoyed in this glen. Highest quality area is at lower glen floor (ancient woodland); • Low priority project/area – consensus across group; • Very few visitors – remote.

Gleann nan Caorann

Line Section
YW.1

B	**Landscape enhancement** Extension of planting of native trees (i.e. Scots Pine) and regeneration of overgrazed vegetation along the corridor of the overhead line and parallel access track towards the southern footslopes of Ben Lui. Within wild land area.	**££**	★★★	• Requirement for land owner agreement/collaboration – estates; • Operational limitations along wayleave of overhead line may restrict where new planting can take place; • Longer distance visual effects will remain, including from the Munro summit of Ben Lui and upland slopes within wild land area; • Long-term timescale for effectiveness of mitigation. • Difficulty of establishing vegetation; • Heavy planting could be appropriate to the landscape context; • Technical constraints around restoration of woodland; • Wayleave will have to be maintained; • Peat; • Practicalities – fencing, access; • Would it reduce the impacts? • Effect on deer management; • A long time to establish.	• Could facilitate the delivery of wild land objectives, which are consistent with other organisations; • Opportunity to improve access and recreation through Gleann nan Caorann and the wider wild land area; • Opportunity to tie in to a wider network of paths, information points linked to the 50 years of Cruachan and a possible 'Utilities Spine' from Cruachan back to Glasgow via Loch Katrine and Loch Arklet (cultural/industrial heritage walking route). • Would help to break up views of the overhead line; • Recreational opportunities, loop from WHW; • Active community development trust in the area; • Link to recreation provision for additional benefits beyond natural heritage; • Tree planting has multiple benefits; • Worthy of consideration for enhancement for key mountainous/wildness area in terms of special qualities; • Would soften impact.	• Best Value: Relatively low capital cost, but will only partially mitigate impacts from limited locations; • A tangible long lasting legacy of this initiative which would be seen in the landscape; • Potential to tie in with the Mountains and People initiative. • Short-term vs long term; • Mountains and People path project; • Could pylons be painted? • Part of Glen Falloch Woods SSSI/SAC extends into the Glen, OHL passes through this designation; • Potential to tie into Inverarnan/Inveruglas/Sloy enhancement; • Potential for landscape enhancement but seen as low priority.

Inverarnan

Line Section
YW.2

	Mitigation Proposal & Description	Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Undergrounding** Undergrounding of 9 km section of overhead line from Inverarnan substation eastwards over the ridge north of Cruach and into Glen Gyle.	**£££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Identification of cable corridor may be difficult; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets from undergrounding (biodiversity/ecology/cultural heritage); • Introduction of sealing end/terminal towers at start and end of underground section. • Impacts on woodland, ecology etc.; • Impacts on the river environment; • Already a transport corridor; • Is undergrounding genuinely feasible without creating an equal impact from rock cut etc? • Issues of substations; • Visual impact due to hydro tracks in this area; • Very high cost – not justified.	• Removal of towers which cross steep ground east of Loch Lomond; • Mitigation effective once implementation is complete. • Inverarnan a highly sensitive area; • Would remove pylons from skyline; • It is hard to think how this line could be meaning fully improved except by undergrounding it; • View across Glen from WNW would be closed up (slightly) so not as such direct view to substation.	• Best Value: Very high capital cost – to mitigate relatively small section of overhead line; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015); • Opportunity to collaborate the VIEW initiative with similar SPEN initiative looking at distribution infrastructure within National Parks and NSAs; • Suggest undergrounding of distribution lines; • Not seen as a priority; • This is such a high profile section of line crossing, arguably the main tourist route through the par. It has to be a high priority for improvement.
B	**Alternative Pylon Design** Alternative/bespoke pylon tower design for overhead line between Inverarnan Substation and the rugged ridge of Cruach to the east (i.e. Icelandic marching men pylon concept design).	**££-£££**	★★	• Proposal doesn't address the visual impact, although may reduce or • Potential juxtaposition between art installation and functional infrastructure; • A potentially controversial – 'hard sell' to Ofgem which would require wide support to be successful. • No associated benefit; • Must be something which works with the Highland landscape.	• Introduction of an exciting focal point/landmark within the National Park at a key gateway; • Opportunity to run a high profile design competition for infrastructure suitable for the Scottish Landscape and in conjunction with SPEN/SHETL (i.e. similar to National Grid T-Pylon design competition); • Potential to tie in any new design/sculptural proposal with the Scenic Routes initiative; • Exciting opportunity to attract people; • Link in to a wider network of installations; • A gateway location; • Really interesting idea, a talking point; • Could be example of best practice opportunity.	• Best Value: Relatively high capital cost – but does not mitigate visual impacts; • A project which may split opinion amongst stakeholders and the public; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015); • Painting of pylons? Sky colour? • Mickey Mouse pylon in Florida.

Inverarnan

Line Section
YW.2

C	**Landscape enhancement** Further landscape enhancement around Inverarnan substation, along Great Glen Way and potentially tied into A82 upgrading.	**£**	★★	• Requirement for land owner agreement/collaboration – Scottish Water/Forestry Commission; • Operational limitations along wayleave of overhead may restrict where planting can take place; • Long term timescale for effectiveness of mitigation. • Don't over-plant, needs to be sensitive to landscape setting; • Tinkering around the edges.	• Collaboration with Great Glen Way recreational user initiatives – delivering mutual benefits; • Reduce visibility and perceptibility of existing infrastructure from Great Glen Way, A82, railway line and other key locations in glen; • Potentially no requirement for associated planning consent; • Short timescale for implementation of mitigation; • Potential for volunteer involvement in implementation; • Mitigate impacts on walkers on WHW who are more sensitive to impacts of the OHL; • Tie into A82 upgrade; • A82 upgrade very constrained ; • Opportunity to restore track edges. • Treatment of other infrastructure to reduce cumulative impact is the best alternative to undergrounding the main power line; • This was always wished as part of planning permission but as won on appeal, not achieved through S75. Native woodland enhancement benefits.	• Best Value: Relatively low capital cost, but will only partially mitigate impacts from limited locations; • A tangible long lasting legacy of this initiative which would be seen in the landscape; • Develop a combination of B, C and D? • Highest priority – consensus of stakeholders in attendance; • A combination of options C + D may be possible and proposed for progression.
D	**New installation** Creation of a sculptural incident or installation, in a similar vein and tying into the Scottish Scenic Routes initiative.	**£-££**	★	• Possible requirement to obtain planning consent for any installation; • Requirement for landowner collaboration/sign-up; • Introduction of further man-made influence into this landscape – associated visual impacts; • Challenge to find a sensitive design for a man-made intervention in the natural environment; • Artworks are highly personal/subjective – could be controversial/unpopular.	• Added visitor attraction/point of interest in already popular location; • Opportunities to link into existing Scenic Routes initiative installations around the National Park – Great Trossachs Path route and run a design competition in conjunction with this initiative; • Opportunity to tie in to a wider network of paths, information points linked to the 50 years of Cruachan and a possible 'Utilities Spine' from Cruachan back to Glasgow; • A tangible long lasting legacy of this initiative which would be seen in the landscape; • Gateway installation in the area; • Large numbers of people would be able to visit; • Impacts on traffic/seasonal traffic levels; • A82 upgrade very constrained.	• Best Value: Relatively low capital cost, but will not directly mitigate impacts of existing overhead line; • More difficult to justify to Ofgem through the application for funding, if further, albeit associated visual effects will arise from the mitigation proposed; • Developing an installation proposal may encounter similar issues to those of the Scenic Routes initiative; • Strathfillan Community Development Trust are very proactive; • Competition, needs to be the right scheme.

Glen Gyle

Line Section
YW.3

Mitigation Proposal & Description		Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Undergrounding** Undergrounding of 275 kV overhead line through Glen Gyle to remove towers visible within the Glen and from within the wider Ben More - Ben Ledi WLA.	**£££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Identification of cable corridor may be difficult; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets from undergrounding (biodiversity/ecology/cultural heritage); • Introduction of sealing end/terminal towers at start and end of underground section; • Requirement for terminal tower and sealing end compound; • Associated impacts of undergrounding; • Adding new impacts which may not be outweighed by benefit; • Water catchment/hydrology issues; • Would need to involve undergrounding of an extensive section to be worthwhile; • Need for sealing end compounds at either end of underground section; • Impacts of undergrounding may be worse – shed/ medium tear; • Construction impacts on tourist interests and access; • What is the impact of ground heating?	• Mitigation effective once implementation is complete; • Removal of overhead line would contribute to the Ben More – Ben Ledi Wild Land Area characteristics through a reduction/removal of man-made elements; • Opportunity to contribute positively to the objectives of the Great Trossachs Forest initiative. • Proposed off road route alongside existing pylon route could result in longer increase in public access along this route; • Strongly agree with above statement opening up the potential for people to walk from Glen Gyle to Inverlochlairg, i.e. in the footsteps of the McGregor's; • Best option; • Sealing end compounds away from key focal areas; • Would be great to see them removed from here but not that many people go up Glen Gyle.	• Best Value: Very high capital cost – to mitigate relatively small section of overhead line; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015); • Not value for money; • Not worth pursuing; • Painting of towers? • Micrositing of pylons; • Tourism very important in area; • May need to extend area/section of undergrounding into Glen Gyle beyond Loch Arklet in order to deliver.

Glen Gyle

Line Section
YW.3

B	**Landscape enhancement** Planting of native trees (i.e. Scots Pine) in line with the Great Trossachs Forest Initiative and regeneration of overgrazed vegetation along the corridor of the overhead line and parallel access track towards the southern footslopes of Ben Lui. Within wild land area.	**£**	★★★	• Requirement for land owner agreement/collaboration – Scottish Water/Forestry Commission; • Operational limitations along wayleave of overhead may restrict where planting can take place; • Long term timescale for effectiveness of mitigation; • Large scale mitigation required to deliver meaningful benefits in terms of screening; • Need to understand the GTF initiative and its aims; • Query planting within WLA? • Relatively well wooded already; • More fragile landscape; • Fewer people will benefit; • Power line is a constraint to planting; • Already funding for this area through NNR, money should be spent elsewhere; • Change of habitat – peatlands, water table? • Trees will never disguise the pylon line.	• Collaboration with Great Trossachs Forest initiative – delivering mutual benefits; • Reduce visibility and perceptibility of existing infrastructure from Great Trossachs Path; • Potentially no requirement for associated planning consent; • Short timescale for implementation of mitigation; • Relatively low capital cost and ease of implementation; • Potential for volunteer involvement in implementation; • Ecological / economic benefits need to be communicated; • Could benefit wilderness experience; • Relatively low cost; • Potentially more people will be attracted by NNR designation; • Improve access to experience of wildness/wild land; • Planting of Scots pine; • Would need to be coordinated in order to complement the aims of the NNR initiative; • Traditional drovers' route between Loch Katrine and Inverarnan; • Link to cultural heritage of area – Cruachan.	• Best Value: Relatively low capital cost, but will only partially mitigate impacts from limited locations; • A tangible long lasting legacy of this initiative which would be seen in the landscape. • Great Trossachs Forest initiative – Sue Morris project officer; • Great Trossachs Trail new route; • The GTF would benefit from this proposal, however would giving more money to this highly funded project be the best use of the money; • Better option in terms of tourism – light touch option; • Ongoing refurbishment works of line – track upgrades – outcome of works unknown.

Stronachlachar, Loch Katrine

Line Section
YW.4

	Mitigation Proposal & Description	Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Undergrounding** Undergrounding of approximately 2 km of 275 kV overhead line to remove towers visible above headland near Stronachlachar, from Stronachlachar Pier and café, Great Trossachs trail and nearby residential properties.	**£££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Identification of cable corridor may be difficult; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets from undergrounding (biodiversity/ecology/cultural heritage); • Introduction of sealing end/terminal towers at start and end of underground section; • Difficulty of engineering/technical issues; • Cable route difficult to achieve; • Operational issues with faults; • Temporary impacts and long-term scarring; • Requirements for sealing end; • Geology; • Only a short section; • This would be preferred over re-routing as infrastructure could go under existing road, issue over substations next to path; • The geology of this area is highly challenging and if not careful could ruin the actual landscape trying to enhance; • Associated Impacts; • Need to incorporate/locate sealing end compounds.	• Remove visibility of towers from Stronachlachar Pier and café, Great Trossachs trail and nearby residential properties; • Mitigation effective once implementation is complete; • Has merit as the line is so visible; • As this section of line is so visually prominent from tourist boats and other viewpoints, it would be a very high priority; • Undergrounding would be ideal, would re-routing back from the end of the loch offer scope to soften/backcloth? • Key ‘Honeypot’ visitor attraction in NP.	• Best Value: Very high capital cost – to mitigate relatively small section of overhead line; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN’s *Approach to Routeing and Environmental Impact Assessment* (2015); • Opportunity to collaborate the VIEW initiative with similar SPEN initiative looking at distribution infrastructure within National Parks and NSAs; • Scottish Water access required at all times; • Could it be placed under the loch. • It sits in the middle of the Great Trossachs Forest, in the very centre of the ‘Wildest’ part of the national park – Agreed! • Visitor numbers/coach numbers from to Loch Katrine – Paddle Steamer.
B	**Re-routeing** Minor re-route of approximately 2 km of 275 kV overhead line to remove towers visible above headland near Stronachlachar, from Stronachlachar Pier and café, Great Trossachs trail and nearby residential properties.	**£££££**	★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets (biodiversity/ecology/cultural heritage); • Infrastructure will remain visible in long term, though less prominent; • Major works would cause disturbance; • Construction impacts on local residents;	• Reduce visibility of towers from Stronachlachar Pier and café, Great Trossachs trail and nearby residential properties; • Mitigation effective once implementation is complete. • More desirable than undergrounding; • High number of visitors would benefit, boat trips, walkers cyclists and case users, plus those using holiday lets; • Preferable to undergrounding- lower cost and less damage – lots of tourist benefits.	• Best Value: High capital cost – to mitigate relatively small section of overhead line; • Not a very creative or exciting project to progress through this initiative; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN’s *Approach to Routeing and Environmental Impact Assessment* (2015); • Alternative tower design? • Removal of distribution assets south of Stronachlachar;

Stronachlachar, Loch Katrine

Line Section
YW.4

				• Would not benefit all receptors as only focused on one view; • Visual cumulative impact as hydro scheme in this area, paths for works must be carefully constructed; • The red route on the map would be as intrusive (or worse) than the current one.		• Further analysis of all views required; • Worth looking at; • This would be value for money due to high visitor numbers; • Best option here given scale of visual impact; • Is it feasible? • Moving impacts elsewhere? • Limited area of mitigation.
C	**Landscape enhancement** Catchment and green infrastructure improvements (native tree and shrub planting) along corridor of existing 275 kV overhead line to screen and filter localised views	**£**	★★	• Requirement for land owner agreement/collaboration – Scottish Water/Forestry Commission; • Operational limitations along wayleave of overhead may restrict where planting can take place; • Long term timescale for effectiveness of mitigation; • Need to collaborate with GFT project; • A lot happening with GFT anyway, what more can be added?	• Collaboration with Great Trossachs Forest initiative – delivering mutual benefits; • Reduce visibility and perceptibility of existing infrastructure from Great Trossachs Path; • Potentially no requirement for associated planning consent; • Short timescale for implementation of mitigation; • Relatively low capital cost and ease of implementation; • Potential for volunteer involvement in implementation; • Potential for removal of invasive species, management of grazing; • Expansion of native planting; • Makes sense.	• Best Value: Relatively low capital cost, but will only partially mitigate impacts from limited locations; • A tangible long lasting legacy of this initiative which would be seen in the landscape; • H&S issues around the cascade; • It would be good to link up sections YW.4 and YW.5. Pylon seen between these is very visually intrusive; • Link to heritage opportunities; • Combination of C and D; • Seen as highest priority.
D	**New installation** New installation or attraction at Stronachlachar, or on small headland to north, to focus views south-east along Loch Katrine away from existing infrastructure	**££**	★	• Possible requirement to obtain planning consent for any installation; • Requirement for landowner collaboration/sign-up - Scottish Water/Forestry Commission; • Introduction of further man-made influence into this landscape – associated visual impacts; • Community engagement/buy-in required; • Sceptical whether this would help or be welcomed locally; • Need to take care as already a high quality scenic area. If a runner is used designed with minimising visual impact; • Creating another eyesore does not necessarily improve the situation.	• Added visitor attraction/point of interest in already popular location; • Opportunities to link into existing Scenic Routes initiative installations around the National Park – Great Trossachs Path route; • Opportunity to run a design competition in conjunction with this initiative; • Opportunity to tie in to a wider network of paths, information points linked to the 50 years of Cruachan and a possible 'Utilities Spine' from Cruachan back to Glasgow via Loch Katrine and Loch Arklet (cultural/industrial heritage walking route); • Due to character of Stronachlachar. A high level of visitors here a well place/designed installation could have a large public benefit an as an attraction accessed by water transport.	• Best Value: Relatively low capital cost, but will not directly mitigate impacts of existing overhead line; • More difficult to justify to Ofgem through the application for funding, if further, albeit associated visual effects will arise from the mitigation proposed; • Developing an installation proposal may encounter similar issues to those of the Scenic Routes initiative; • A tangible long lasting legacy of this initiative which would be seen in the landscape; • FCS land, leased from Scottish Water.

Loch Ard Forest Central and South

Line Sections
YW.6-7

	Mitigation Proposal & Description	Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Landscape enhancement** Restructuring of forestry, tied into a management plan and access strategy for the Loch Ard Forest in order to maintain and improve screening of overhead line provided by coniferous forestry and deciduous woodland. Coupled with improvement of access (circular routes for walking/mountain biking) and softening of wayleaves through the forest. Possible access route along the linear route of the Loch Katrine water project (aqueduct/pipeline) – the 'Utilities Spine route' back to Glasgow / potential cultural heritage link/new long distance footpath/cycle route with linked nodes along route (50 years of Cruachan celebration).	**££**	★★★	• Requirement for land owner agreement/collaboration – Scottish Water/Forestry Commission; • Operational limitations along wayleave of overhead may restrict where the restructuring of forestry/woodland planting can take place; • Long term timescale for effectiveness of mitigation (i.e. a generational cycle of forestry growth/management); • Difficulty integrating access and recreation around the operational constraints of the infrastructure; • Potential conflict with Strath Ard ecosystem services project; • Cumulative impacts as there is a consented hydro scheme in the area; • Large scale project/long term before benefits are seen/achieved; • Management plans for existing forestry may restrict what can be delivered.	• Collaboration with Great Trossachs Forest initiative – delivering mutual benefits; • Reduce visibility and perceptibility of existing infrastructure from Great Trossachs Path; • Potentially no requirement for associated planning consent; • Short timescale for implementation of mitigation; • Relatively low capital cost and ease of implementation; • Potential for volunteer involvement in implementation; • Opportunities to increase and improve access and recreation opportunities (i.e. walking/mountain biking); • Opportunity to tie in to a wider network of paths, information points linked to the 50 years of Cruachan and a possible 'Utilities Spine' from Cruachan back to Glasgow via Loch Katrine, Loch Arklet and the Loch Ard Forest (cultural/industrial heritage walking route); • Improve visual experience form Rob Roy Way long distance footpath and National Cycle Route 7 at eastern extent of overhead line section. • Opportunities for associated planting/softening of wayleaves with watersheds of burns etc.; • Tie into cultural heritage, explain importance of the power line and aqueducts etc. instead of hiding it; • Interpretation, access, recreation; • Re-structuring of the forest along the way leave could support projects on ecosystem services, woodland habitat connectivity and natural flood risk management. This way leave is very visible from the summit of Ben Lomond (the Munro of choice for most Glaswegians); • Better integration of OHL and forestry; • Opportunities to dovetail with standard project; • Restructuring of forestry may deliver mutual benefits for visual impacts and flood prevention catchment management; • Links to access provision being promoted by Strathard Project.	• Best Value: Relatively low capital cost, but will only partially mitigate impacts from limited locations; • A tangible long lasting legacy of this initiative which would be seen in the landscape long into the future; • Opportunity to tie into a much wider initiative to reduce commercial monoculture forestry in the National Park and reintroduce native woodland structure; • Strath Ard Flood Risk Management Project – SEPA/Scottish Water, seeking to alleviate flooding in Aberfeldy; • OHL and Forestry independent of one another – coincidental; • Planting within way leave corridors may assist with softening of impacts – feathering edges of wayleaves; • Propose a NP wide best practice approach/guidance? • Forestry design guide.

East of Drymen

Line Section
YW.8

Mitigation Proposal & Description		Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Undergrounding** Undergrounding of approximately 9 km of 275 kV overhead line from south-east corner of the NP eastwards towards Flanders Moss and the B835, reducing visibility from the West Highland Way, Rob Roy Way, John Muir Way and the NCR7.	**£££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Identification of cable corridor may be difficult; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets from undergrounding (biodiversity/ecology/cultural heritage); • Introduction of sealing end/terminal towers at start and end of underground section. • Peat issues; • Transitional landscape; • Is it worth it? • Technical issues with this line.	• Mitigation effective once implementation is complete; • Removal of overhead line away from this gateway to the National Park would improve the views into the National Park experienced by transient receptors travelling by road and walkers along the West Highland Way/Rob Roy Way; • Removal visual impacts from settlement of Drymen and scattered farmsteads and properties close to overhead line. • Benefits for a large number of receptors; • Gateways are very important – want to arrive somewhere special. • Would remove visual impact in an area which sees many visitors entering the park –especially on foot.	• Best Value: Very high capital cost – to mitigate relatively small section of overhead line; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015). • Open landscape and don't feel strongly about need to underground or re-route.
B	**Re-routeing** Minor re-route of approximately 8 km of 275 kV overhead line from south-east corner of the NP eastwards towards Flanders Moss and the B835, reducing visibility from the West Highland Way, Rob Roy Way, John Muir Way and the NCR7.	**£££££**	★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets (biodiversity/ecology/cultural heritage); • Infrastructure will remain visible in long term, though less prominent. • Only shifts the impact further along the valley; • Would result in a longer route across the carse; • Very intervisible landscape, would still affect setting of the park. • Moving impacts elsewhere.	• Mitigation effective once implementation is complete; • Re-routeing of overhead line away from this gateway to the National Park would improve the views into the National Park experienced by transient receptors travelling by road and walkers along the West Highland Way/John Muir Way/Rob Roy Way; • Removal visual impacts from settlement of Drymen and scattered farmsteads and properties close to overhead line. • Would remove visual impact in an area which sees many visitors entering the park –especially on foot.	• Best Value: High capital cost – to mitigate relatively small section of overhead line; • Not a very creative or exciting project to progress through this initiative; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015). • Re-routeing not worth pursuing; • Change colours/finishes of towers? Mirror finish? • Open landscape still visible from NP.
C	**Landscape enhancement** Landscape improvements to improve the integration of the overhead line in the area of the West Highland Way/John Muir Way/Rob Roy Way/NCR7 Development of forest management strategy/community woodland project which responds	**£**	★-★★	• Requirement for land owner agreement/collaboration – Scottish Water/Forestry Commission; • Operational limitations along wayleave of overhead may restrict where the restructuring of forestry/woodland planting can take place; • Long term timescale for effectiveness of mitigation (i.e. a generational cycle of forestry growth/management); • Difficulty integrating access and recreation	• Improve visual experience form West Highland Way, John Muir Way, Rob Roy Way long distance footpath and National Cycle Route 7 at eastern extent of overhead line section; • Potential for volunteer involvement in implementation; • Potentially no requirement for associated planning consent; • Short timescale for implementation of mitigation; • Relatively low capital cost and ease of implementation; • Cost effective;	• Best Value: Relatively low capital cost, but will only partially mitigate impacts from limited locations; • A tangible long lasting legacy of this initiative which would be seen in the landscape long into the future. • Tie into long-term forestry plans; • NFU and landowners; • Area characterised by forestry, moorland and

	to the presence of the overhead line in providing long term permanent screening of the overhead line and recreation opportunities			around the operational constraints of the infrastructure; • Long-term management and ownership to be resolved; • Other factors outside control of the project; • Scale of line in close proximity to users of footpaths, etc.	• Opportunities to work with landowners; • Plenty of scope for native woodland expansion in lowland context; • Benefits for a large number of receptors - 50,000 people on the WHW; • Best option to maximise benefit against coast; • Combination of C and D may be best option; • Green network opportunities; • Long term management plan for forestry/woodland, which currently offers screening from key roads/interests?	farmland. Additional woodland would fit well in the landscape; • High priority due to tourism/visitor interest large number of visitors (long distance footpaths/NCR etc.).
D	**New installation** Art installation on the West Highland Way/John Muir Way/ Rob Roy Way/NCR7, located to distract viewers from the presence of the overhead line.	**£-££**	★	• Possible requirement to obtain planning consent for any installation; • Requirement for landowner collaboration/sign-up – e.g. Forestry Commission; • Introduction of further man-made influence into this landscape – associated visual impacts; • Art works are subjective, could be unpopular; • Not clear where you would locate this?	• Distract viewers away from the presence overhead line, focusing their attention on views elsewhere; • Opportunity to run a design competition in conjunction with this initiative; • Opportunities to link into existing Scenic Routes initiative installations around the National Park – West Highland Way / John Muir Way route; • Uncertain about how this would work in practice; • Interpretation: geology, glacial moraine, Highland boundary, Roman fort, Cruachan line; • Interpretation/story boards would enhance visitor experience.	• Best Value: Relatively low capital cost, but will not mitigate impacts, instead it will distract viewers from existing views of overhead line; • More difficult to justify to Ofgem through the application for funding, if further, albeit associated visual effects will arise from the mitigation proposed; • More scope for this type of project here than at Killin; • Scenic routes type installation? • Lower quality area of the NP/lesser quality.

Glen Fruin

Line Section
CL-CK.1

Mitigation Proposal & Description		Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Undergrounding** Undergrounding of a section of both overhead lines through the National Park to appropriate terminal tower positions located outside the National Park boundary.	**££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Identification of cable corridor may be difficult; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets from undergrounding (biodiversity/ecology/cultural heritage); • Introduction of sealing end/terminal towers at start and end of underground section. • Offers little added value; • Disruptive works; • Oil pipelines and water mains run underground through this area; • Very high cost; • Disturbance to Hen Harriers in Glen; • Agreed.	• Mitigation effective once implementation is complete; • Opportunity to improve the landscape setting of this lost corner of the National Park; • Removal of infrastructure may open up this corner of the park to local communities of Helensburgh for access and recreation; • Opportunity to tie in removal of overhead line with other landscape initiatives planned for the glen and surrounding area; • Improvements to experience of Cowal Way/ John Muir Way/ gateway to park; • Agreed.	• Best Value: Very high capital cost – to mitigate relatively small section of overhead line; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015); • Opportunity to collaborate the VIEW initiative with similar SPEN initiative looking at distribution infrastructure within National Parks and NSAs; • People are used to pylons in this location; • Too expensive/ not good value for money. • Not value for money.
B	**Re-routeing** Re-routeing of 132 kV overhead lines outside of National Park boundary to the south.	**££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets (biodiversity/ecology/cultural heritage); • Infrastructure will remain visible in long term, though less prominent; • May introduce visibility of rerouted overhead line to a much greater number of people (i.e. settlement of Helensburgh). • Local residents outside the park would be adversely affected; • Visual impacts on Helensburgh, likely to be very negatively received; • Pylons would be on ridge, highly visible with impacts on views towards the National Park; • Only moves the pylons across 'a line on the map'. • Disturbance to Hen Harriers; • Residents of Helensburgh will have a lot to say if they can see new pylons from their houses;	• Mitigation effective once implementation is complete; • Opportunity to improve the landscape setting of this lost corner of the National Park; • Removal of infrastructure may open up this corner of the park to local communities of Helensburgh for access and recreation; • Opportunity to tie in removal of overhead line with other landscape initiatives planned for the glen and surrounding area.	• Best Value: High capital cost – to mitigate relatively small section of overhead line; • Not a very creative or exciting project to progress through this initiative; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015); • Not seen as a priority; • Impact on views from Ben Bowie; • Not value for money; • Reverse OR re-route trails; • Helensburgh has seen a 'Renaissance' of late through investment and has further ambitions i.e. tourism etc.

				• Impacts on Helensburgh – economic/tourism implications; • Could be detrimental.		
C	**Landscape enhancement** Improvements along the Three Lochs Way long-distance path, including an alternative route inland through upper Glen Luss - including landscaping - wide scale planting in the glen, improvement to the aesthetics of the track.	£	★★	• Requirement for land owner agreement/collaboration – Luss Estates/Ministry of Defence (MOD); • Operational limitations along wayleave of overhead may restrict where planting can take place; • Long term timescale for effectiveness of mitigation. • Justification would be harder; • Line still creates a visual impact; • Need for long terms ownership/management of route and any woodland planting. • Disturbance to Hen Harriers; • Improvement of experience to Three Lochs Way; • Improve a degraded part of the park – which is accessible to many (Helensburgh).	• Reduce visibility and perceptibility of existing infrastructure from Core Paths and Three Lochs Way; • Potentially no requirement for associated planning consent; • Short timescale for implementation of mitigation; • Relatively low capital cost and ease of implementation; • Potential for volunteer involvement in implementation. • Utilise existing access track, which is to be narrowed; • Focus on views north across the valley; • Opportunities for circular walks and increased accessibility/recreation; • “Third most popular long-distance path” – well used; • New route would take people away from the pylons; • Added value for biodiversity along the Fruin; • Existing plans for forestry restructuring; • Opportunity for woodland expansion; • Would be of significant benefit in tourism and recreational terms.	• Best Value: Relatively low capital cost, but will only partially mitigate impacts from limited locations; • A tangible long lasting legacy of this initiative which would be seen in the landscape. • Requirement for a footbridge to create circular walks; • Also look at opportunities associated with John Muir Way between Helensburgh and Balloch; • Unattractive substation just outside the National Park to the south; • A walkers’ gateway to/from the National Park and Helensburgh. • Best option; • High priority – consensus of group; • Smaller but larger number of landscape enhancements schemes seen as most beneficial.

Eildon & Leaderfoot NSA

Line Sections
AT-U-V

Mitigation Proposal & Description		Indicative Capital Cost	Effectiveness of Mitigation	Negative aspects	Positive aspects	Additional Comments
A	**Undergrounding** Removal of 8km of existing overhead line and undergrounding (through the NSA).	**£££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Identification of cable corridor may be difficult – impacts on the Leader Water Valley and deciduous woodland; • Impacts during removal of existing infrastructure and construction; • Is it justified? • Not highest benefit compared to other areas/lines; • Potential construction effects; • Sealing ends.	• Removal of overhead line would eradicate all presence of transmission infrastructure within the NSA, and set a potential precedent for elsewhere in Scotland; • Mitigation effective as soon as implementation is complete; • Easier to implement but are impacts great enough to merit spend?	• Best Value: High capital cost – to mitigate relatively small section of overhead line with unsubstantial impacts on the NSA due to its scale and location; • More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015); • Not worth it – small impact/large cost.
B	**Re-routeing** Re-routeing of 8 km of existing overhead line along an alternative alignment to the north of the NSA, or replacement of 132 kV AT and U routes with one 275 kV overhead line alignment to north of NSA.	**£££-££££**	★★★★★	• Likely requirement for Section 37 planning application and EIA for consent; • Lengthy timescale for implementation; • Impacts during removal of existing infrastructure and construction; • Impacts on other heritage assets (biodiversity/ecology/cultural heritage); • Infrastructure will remain visible in long term, though less prominent; • May result in visibility of larger and more prominent 275 kV overhead line from within the NSA if routed within relatively close proximity to the north; • Could be part of a future project but not as part of this one if likely to change anyway; • Only shifts the problem elsewhere.	• Remove presence of all transmission infrastructure from the NSA; • Mitigation effective once implementation is complete.	• Best Value: Very high capital cost – to mitigate relatively small section of overhead line, and which may take a considerable time to implement (planning, assessment, consent etc.); More detailed technical feasibility and environmental impact assessment would need to be undertaken in line with SPEN's *Approach to Routeing and Environmental Impact Assessment* (2015).

Eildon & Leaderfoot NSA

Line Sections
AT-U-V

C	**Landscape enhancement** Development of an Eildon and Leaderfoot NSA Management Strategy/Plan. The plan must include objectives linked to the mitigation of visual impacts associated with overhead line infrastructure, and a chapter on the topic (rationalisation of infrastructure, removal of clutter, and future re-routeing out of the NSA).	**£**	★	• Requirement to link the management strategy/plan to identified landscape and visual impacts associated with the overhead line; • Requires collaboration of many other parties to develop a strategy with clear objectives for the NSA as a whole – difficult to reach consensus; • Is it a valid mitigation response? • Need local authority buy-in as they may have to fund future maintenance etc.	• Opportunity to collaborate the VIEW initiative with similar SPEN initiative looking at distribution infrastructure within National Parks and NSAs; • Strategy/plan could act as a key facilitator for other initiatives within the NSA, and delivery of other objectives (i.e. increased tourism, access, recreation etc.); • A good way of accessing funding for this area; • Potential low cost; • Larger-scale regeneration project? • Deal with clutter across the area; • Targeted planting/screening, with wider benefits for biodiversity; • Potential landowner support? • Landscape-led approach; • Tie-in with Borders Railway which terminates in the NSA – accessible and well-used area; • Southern Upland Way.	• Management strategy/plan would need to be developed with all stakeholders and landowners involved; • A long-term vision, with lessons to be learned from previous attempts to develop a similar strategy for the NSA (Late 1980's); • Dumfries & Galloway NSAs have set a clear precedent which can be followed, especially in addressing very similar types and scales of landscape to the Eildon & Leaderfoot NSA; • What is the lifetime of the assets in relation to the timescale of a management plan? • Lots of opportunities to address distribution lines.

SP ENERGY NETWORKS

For more information about Changing the VIEW

www.spenergynetworks.co.uk/pages/view_project.asp

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