Scottish & Southern Electricity Networks

TRANSMISSION

Creag Dhubh to Inveraray 275kV Connection

Environmental Impact Assessment

Volume 4 | Appendix 6.5

Wild Land Impact Assessment Consultation

July 2022

Scottish & Southern Electricity Networks

TRANSMISSION

CONTENTS

1 INTRODUCTION

1.0.1 **Annex A** provides the Technical Note and associated figures setting out the justification for not including a Wild Land Impact Assessment (WLIA) as part of the SLVIA. This note was shared with NatureScot and it was agreed during a meeting on 19 May 2022 that a WLIA was not required.

ANNEX A- TECHNICAL NOTE

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TECHNICAL NOTE

Project name	**Creag Dhubh to Inveraray 275 kV Overhead Line (LT194)**
Project no.	**1620011091**
Client	**SSEN**
Version	**001**
To	**Ruari Dunsmuir**
From	**Sara Notfors**
Copy to	**Caroline Collis** **Briony McIntosh**
Prepared by	**Sara Notfors**
Robert Bainsfair	**Robert Bainsfair**
Approved by	**Robert Bainsfair**

LT194 Wild Land Impact Assessment

Date 12/05/2022

Scottish and Southern Electricity Networks Transmission (SSEN Transmission) is proposing to submit an application for consent to construct and operate an 8.5 km double circuit 275 kV overhead line (OHL), supported by lattice steel towers between the proposed Creag Dhubh substation and a connection point on the recently constructed Inveraray to Crossaig OHL, near Inveraray in Argyll, Scotland (described hereafter as the 'Proposed Development').

Ramboll's team of Chartered Landscape Architects have been commissioned by SSEN Transmission hereafter referred to as "the Applicant", to prepare a Landscape and Visual Impact Assessment (LVIA) of which a Wild Land Impact Assessment (WLIA) may form a part.

Supporting documents:

- Figure 1 WLA and ZTV;
- Figure 2 WLA and Relative Wildness;
- Figure 3 WLA with ZTV and Relative Wildness; and
- Figures 4.1 – 4.6 Photomontages of VP6, VP10 and VP13.

Preamble

This Technical Note is intended as part of the continued consultation with NatureScot with respect to achieving a proportionate assessment of likely landscape and visual impacts, and more specifically the necessity and approach to the assessment of impacts on the Ben Lui and Loch Etive Wild Land Areas (WLAs).

In preparing this Technical Note, cognisance has been given to NatureScot's guidance on Wild Land Impact Assessment (Assessing impacts of Wild Land Areas – technical guidance Sept 2020) in particular the following:

- *"The impact of development and other proposals on WLAs, as they are experienced from within the WLA, not from outwith."*

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- *"The assessment should consider effects on the physical attributes and perceptual responses that contribute to the WLA qualities."*
- *"This guidance should only be applied to proposals whose nature, siting, scale or design are likely to result in a significant effect on the qualities of a WLA. Given this, assessments are more likely for proposals within a WLA, and are less-likely for proposals outwith the WLA."*
- The approach should be *"concise and proportionate, focused on likely significant effects on the qualities."*

In considering whether a WLIA is necessary (i.e. whether effects on the WLA are likely to be significant for either of the WLIAs) key determining factors have included:

- The likely visibility and prominence of the Proposed Development (given it is outwith the WLAs and would therefore only affect perceptual aspects of the WLA). This would include matters pertaining to:
    - WLAs distance from the Proposed Development;
    - Relative elevation of WLA and Proposed Development;
    - Geographical extent of WLA affected by views of the Proposed Development and what key receptor locations/routes within the WLA would be affected);
    - Whether the Proposed Development would be backclothed or skylined;
    - Likely proportion of key views out of WLA that would be affected by the Proposed Development and the perceived scale/prominence of the Proposed Development;
    - The degree of contrast between the baseline context and the Proposed Development and consequent degree of conspicuousness.
- Potential for cumulative effects; and
- Wild land qualities likely to be significantly affected.

Ben Lui WLA

As indicated in Figure 1 and Figure 3, attached, areas of theoretical visibility are concentrated on summits in the western and northern parts of this WLA. Figure 2: which is based on the Relative Wildness mapping produced by NatureScot shows these summits to have a high degree of relative wildness; their key attributes being their massive, rugged appearance (western) and the arresting, distinctive and angular forms (northeastern) with exposed rock, cliffs, boulders, scree and crags between which rarer alpine species can be found.

The Proposed Development would be located outwith the WLA and would be seen at distances over 7.5 km from Lochan Shira and 11 km west of Beinn Buidhe, and around 20 km from the Ben Lui summit. Seen from Lochan Shira and Beinn Bhuidhe (representative of the southwestern summits within the WLA) the Proposed Development would be seen distantly to the southwest and west, respectively, and in the opposite direction to the interior of the WLA. The adjacent hill ranges, including Ben Cruachan to the north west make up the panoramic views from high points, and contribute to "the awe-inspiring qualities of this area" however the intervening dark, homogenous coniferous forestry to the north, west and south interrupt the sense of a continuous mountain area and *"emphasise the limited extent of the WLA*." The photomontages in Figures 4.3 – 4.6, illustrate the operational appearance of the Proposed Development from Viewpoint (VP) 13 (Stac a Chuirn) and VP10 (Hilltop above Lochan Shira Reservoir) from where up to eight towers would be visible backclothed against moorland and coniferous forestry west of Glen Array, thereby representing a relatively recessive element in views out of the WLA.

The Ben Lui summit is representative of the northernmost parts of the WLA. From this location (see link below to Google Earth photosphere from Ben Lui summit) the northern and southern extents of the Proposed Development would be visible but would be seen distantly to the southwest. Unlike views from Lochan Shira and Beinn Bhuidhe, views from Ben Lui extend across much of the interior of the WLA and so the Proposed Development would be seen beyond the WLA interior. It would be backclothed by moorland and coniferous forestry west of Glen Array.

The key attributes of the Ben Lui WLA that could be affected by the Proposed Development are listed below along with likely impacts on them:

- *"Contrast between the more massive and remote hills in the south west and the arresting, more visible and popular hills to the north east"* notes that*:*
    - Southwestern summits are less easily reached from nearby settlement with accessibility afforded by lengthy walks along private roads or access tracks (see Figures 4.5 – 4.6, VP13, Stac a Chuirn) making this area less popular and consequently having a greater sense of solitude than the more popular peaks to the northeast.
    - The Proposed Development would be visible beyond these human interventions in the landscape. There would be sense of leaving the settled glens between Loch Awe and Loch Fyne behind once within the WLA which would be unaffected.
    - Combined, these contribute to a sense of remoteness, difficulty in access, solitude and emphasise the contrast or transition from settled glen to the interior of the WLA.
- *"A landscape that is generally well-defined by surrounding human elements in views from higher slopes"* and *"Few human artefacts within much of the upland area, in contrast to some of the glens where hydro development is a recurring feature":*
    - The southwestern summits on the edge of the WLA look across uplands with extensive coniferous forestry with prominent forestry tracks, dammed reservoirs, fences and transmission infrastructure visible in the fore-to-mid-ground beyond which parts of the Proposed Development would be seen backclothed against coniferous forestry or moorland within Glen Aray. See photomontages of the Proposed Development at VP 13, Stac a Chuirn (Figures 4.5 – 4.6) and VP10, Hilltop above Lochan Shira Reservoir (Figures 4.3 – 4.4).
    - The existing intervening human elements within glens beyond the uplands define the extent WLA, the Proposed Development would be visible beyond the uplands and found within Glen Aray and therefore have limited to no impact on this attribute.
    - Views from summits in the northern part of the WLA towards Proposed Development are subject to substantial influence of human artefacts and modified landscapes (Google Earth photosphere https://earth.google.com/web/@56.396946,-4.8104973,1098.06088988a,0d,90y,136.43298764h,85.52459485t,0r/data=Ii8KK0FGMVFpcE9pWE9Jc2xjNVMzOWUzMUN3TjZOQ1VrWEM2YnNtZllNVzhQTFUQBQ):
        - the Dalmally to Inverarnan OHL that crosses the upland plateau in the middle-ground;
        - extensive areas of coniferous forestry outwith the WLA extending to Loch Awe to the northwest; and
        - the variable water levels denoted by exposed substrates of Lochan Shira (reservoir).

Loch Etive WLA

The WLA is approximately 9 km to the north of the Proposed Development. Areas of theoretical visibility are found from summits along the southern edge of the WLA (including Monadh Driseig, Beinn a Bhuiridh, and Ben Cruachan summits) and on Beinn Eunaich and Beinn a'Chochuill summits along western side of Glen Strae and from a number of more distant summits to the northeast (see Figure 1).

According to the relative wildness rating provided in Figure 2, these summits have a high degree of perceived wildness, however localised reductions in relative wildness are apparent within Glen Strae. The Proposed Development would be visible from an elevated locations within the WLA and seen on the lower hillside above the far shore of Loch Awe; approximately half of the towers would be visible backclothed against coniferous forestry occupying a small portion of the view and consequently a minor, recessive element in the panoramic views from the southern boundary of the WLA (see Figures 4.1 – 4.2, VP6 Monadh Driseig).

The key attributes that would be affected are listed below along with the likely impact the Proposed Development would have:

- *"Arresting, steep, high mountains with precipitous rocky tops and ridges that offer panoramic views of elevated tops continuing far into the distance"*
    - Views from these elevated vantage points reveal human artefacts at lower elevations, a characteristic that extends across the large parts of the WLA including the centre around Loch Etive.
    - The Proposed Development would be visible in the mid-distance on the other side of Loch Awe with its settled shores, coniferous forestry and existing transmission infrastructure. It would be discernible and would be consistent with existing landuse in size and scale (for example the Taynuilt to Inveraray 132 kV OHL, Crossaig to Inveraray 275 kV OHL and the proposed Creag Dhubh to Dalmally 275 kV OHL) and as such is not considered to pose potential significant effects on this attribute of the WLA (see Figure 4.2, VP 6 Monadh Drisieg).
- *"A series of deep glens carved through the mountains, with arresting side slopes and spectacular geological features that contribute to a strong sense of naturalness"*
    - Some of these glens contain transport and infrastructure corridors while others, including Glen Strae evidence the cumulative effects of human artefacts including coniferous forestry and estate tracks, impacting on the sense of sanctuary in these areas.
    - The Proposed Development would be visible from the upper northern slopes of Glen Strae viewed in the background of the Strath of Orchy through which the A85, existing transmission infrastructure including the Dalmally substation and scattered settlement are found.
    - The northern part of the Proposed Development would be visible backclothed against coniferous forestry. It would be discernible and viewed within the context of existing human intervention around Loch Awe. It would have a limited effect on this attribute.

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09. Loch Etive mountains
10. Breadalbane - Schiehallion
06. Ben Lui
07. Ben More - Ben Ledi
INVERARAY
LOCH LO

Scale @ A3: 1:
0 0.75 1.5 3 4.5 6 7.5 km

Legend

- Preferred Alignment Towers
- Preferred Alignment
- Proposed Creag Dhubh Substation
- Inveraray - Crossaig Towers
- Inveraray - Crossaig OHL
- 10 km Study Area
- Viewpoint Location
- Wild Land Areas 2014

Zone of Theoretical Visibility

Not Visible

Theoretical Viewshed of Preferred Alignment Towers

1. The ZTV analysis does not take into account the screening effect of vegetation, buildings and other surface features.
2. Predicted visibility based on a viewer eye height 2m above ground.
3. Visibility calculated using Ordnance Survey Terrain 50 m DTM.
4. Effect of earth curvature and light refraction is included.

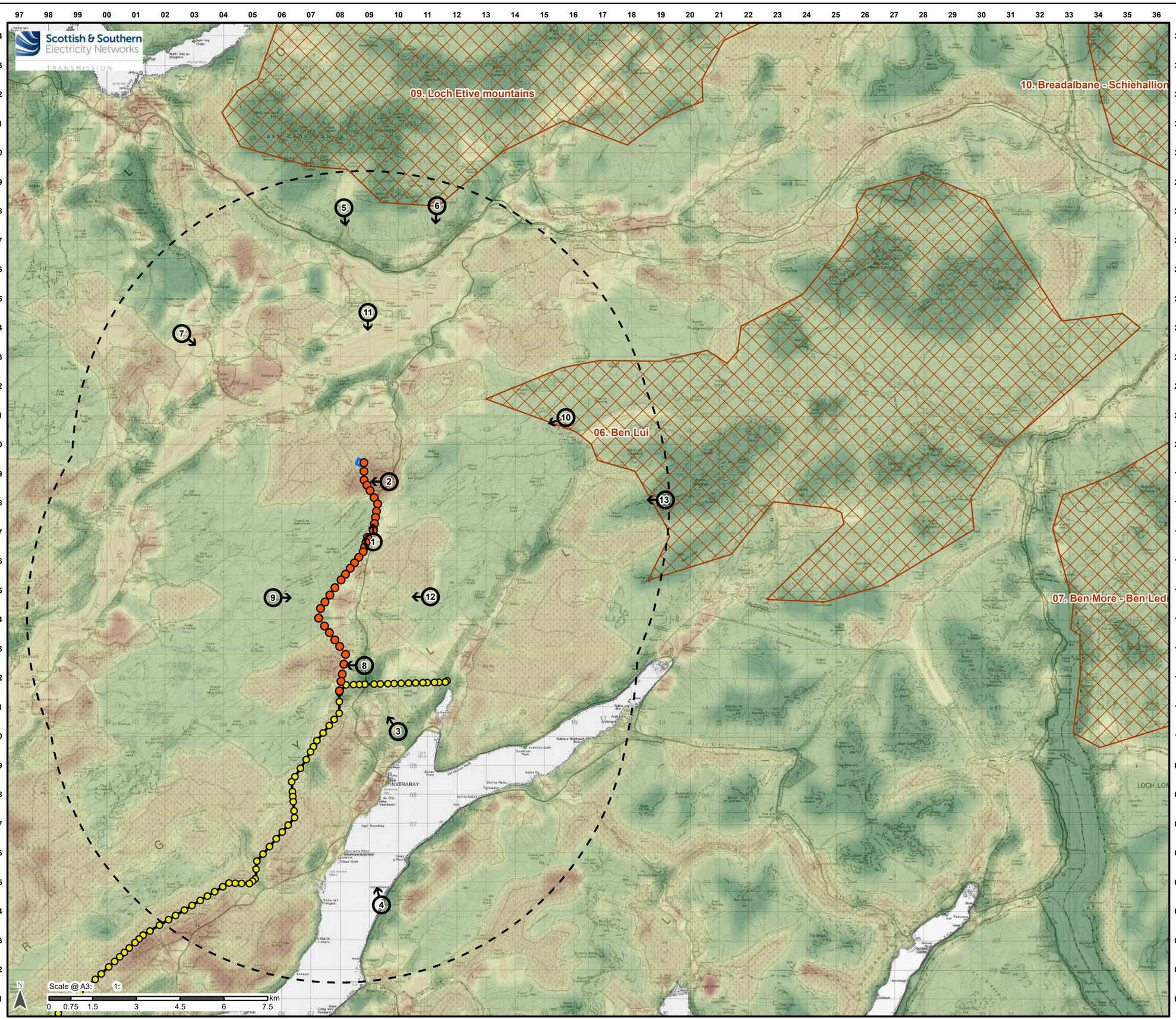
Project No: LT000194
Project: 1620011091

Title: Creag Dhubh to Inveraray 275 kV Overhead Line

Figure 1 WLA and ZTV

Drawn by: NJ Date: 13/05/2022

Drawing: R162_11091_Figx_WLA_ZTV_A



Legend

- Preferred Alignment Towers
- Preferred Alignment
- Proposed Creag Dhubh Substation
- Inveraray - Crossaig Towers
- Inveraray - Crossaig OHL
- Viewpoint Location
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- Wild Land Areas 2014

Relative Wildness

High : 256

Low : 1

Project No:	LT000194
Project:	1620011091
Title:	Creag Dhubh to Inveraray 275 kV Overhead Line Figure 2 WLA and Relative Wildness
Drawn by:	NJ
Date:	13/05/2022
Drawing:	R162_11091_Figx_WLA_RelativeWildness_A

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09. Loch Etive mountains
10. Breadalbane - Schiehallion
06. Ben Lui
07. Ben More - Ben Ledi
INVERARAY
LOCH LOMOND

Scale @ A3: 1:
0 0.75 1.5 3 4.5 6 7.5 km

Legend

- Preferred Alignment Towers
- Preferred Alignment
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Relative Wildness
High : 256
Low : 1

Zone of Theoretical Visibility
Not Visible
Theoretical Viewshed of Preferred Alignment Towers

Project No:	LT000194
Project:	1620011091
Title:	Creag Dhubh to Inveraray 275 kV Overhead Line Figure 3 WLA with ZTV and Relative Wildness
Drawn by:	NJ
Date:	13/05/2022
Drawing:	R162_11091_Figx_WLA_RelativeWildness_A

LT194 OHL LVIA
Figure 4

Site and Viewpoint Location Map

Figures 4.1 - 4.2	Viewpoint 6 (VP6) : Monadh Driseig
Figures 4.3 - 4.4	Viewpoint 10 (V10) : Hilltop above Lochan Shira
Figures 4.5 - 4.6	Viewpoint 13 (VP13) : Stac a Chuirn

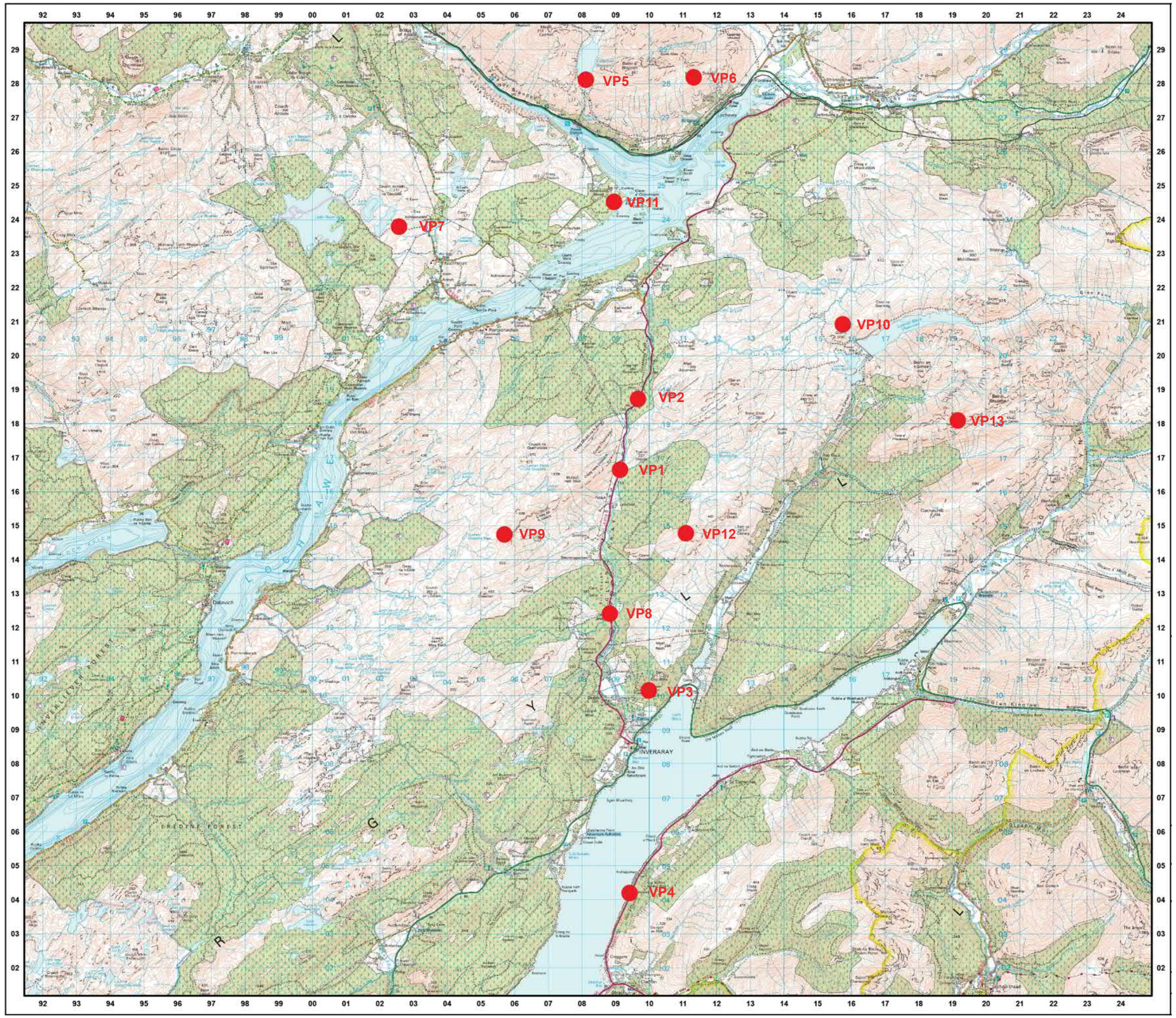

Figure: 4.1
Viewpoint 6: Monadh Driseig (90 degree view)

Inveraray to Creag Dhubh 275 kV Connection

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OS reference:	211322, 728181	Camera:	Nikon D750
Eye Level:	616 m AOD	Lens:	50mm (Nikon AF 50mm f/1.4)
Direction of view:	S	Camera height:	1.5m AGL
Horizontal field of view:	(90˚ cylindrical projection)	Date:	21/10/2021

OS reference:	211322, 728181	Camera:	Nikon D750
Eye Level:	616 m AOD	Lens:	50mm (Nikon AF 50mm f/1.4)
Direction of view:	S	Camera height:	1.5m AGL
Horizontal field of view:	(53.5˚ cylindrical projection)	Date:	19/08/2021

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Figure: 4.2
Viewpoint 6: Monadh Driseig (53.3 degree view)

Inveraray to Creag Dhubh 275 kV Connection

Figure: 4.3
Viewpoint 6: Hilltop above Lochan Shira Reservoir (90 degree view)

Inveraray to Creag Dhubh 275 kV Connection

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OS reference:	215910, 720920	Camera:	Nikon D750
Eye Level:	476 m AOD	Lens:	50mm (Nikon AF 50mm f/1.4)
Direction of view:	W	Camera height:	1.5m AGL
Horizontal field of view:	(90˚ cylindrical projection)	Date:	21/10/2021

OS reference:	215910, 720920	Camera:	Nikon D750
Eye Level:	476 m AOD	Lens:	50mm (Nikon AF 50mm f/1.4)
Direction of view:	W	Camera height:	1.5m AGL
Horizontal field of view:	(53.5˚ cylindrical projection)	Date:	21/10/2021

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Figure: 4.4

Viewpoint 10: Hilltop above Lochan Shira Reservoir (53.3 degree view)

Inveraray to Creag Dhubh 275 kV Connection

Figure: 4.5
Viewpoint 13: Stac a Chuirn (90 degree view)
Inveraray to Creag Dhubh 275 kV Connection

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OS reference:	219054, 718095	Camera:	Nikon D750
Eye Level:	815 m AOD	Lens:	50mm (Nikon AF 50mm f/1.4)
Direction of view:	W	Camera height:	1.5m AGL
Horizontal field of view:	(90˚ cylindrical projection)	Date:	21/10/2021

OS reference:	219054, 718095	Camera:	Nikon D750
Eye Level:	815 m AOD	Lens:	50mm (Nikon AF 50mm f/1.4)
Direction of view:	W	Camera height:	1.5m AGL
Horizontal field of view:	(53.5˚ cylindrical projection)	Date:	21/10/2021

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Figure: 4.6

Viewpoint 13: Stac a Chuirn (53.3 degree view)

Inveraray to Creag Dhubh 275 kV Connection