

From: [Alison Sidgwick](#)
To: Jennifer.heatley@nature.scot; [Elizabeth Tully](#)
Cc: Alison.Daugherty@vattenfall.com
Subject: Clashindarroch II
Date: 17 November 2020 11:42:00
Attachments: [CLON-1AG-600-040-059-A_LCLON046_VCLON009_Wireframes.pdf](#)
[CLON-1AG-600-060-079-A_LCLON046_VCLON009_Wireframes_149p5mTip.pdf](#)
[CLON-1AG-600-080-A_ZTVLCLON046_COMPARISON.pdf](#)

Elizabeth and Jennifer

Thank you both for your time last week, we hope that you found the meeting a useful update on where Vattenfall have got to on a number of issues. The general purpose of the meeting was to update Nature Scot (NS) and Aberdeenshire Council (AC) where Vattenfall have progressed to in respect of a number of matters which are considered to be of interest to them. These are summarised as follows:

Update in respect of aviation

Vattenfall are working with the MOD and there is agreement in principle in respect of what is required. It is anticipated that the wording for a condition can be agreed and as soon as there is agreement we will advise.

NATS have removed their objection and written to the ECU to confirm this.

Work is ongoing with the CAA with respect to visible aviation lighting. A report has been prepared by Osprey, following consultation with stakeholders. This identifies a reduced lighting scheme of 4 turbines which would be lit. These turbines are the cardinal turbines. It is anticipated that the remaining turbines would be lit with IR lighting – this is consistent with the existing turbines. It is hoped that the CAA will respond at the start of December – any update will be provided as swiftly as possible.

Turbine size

Vattenfall have considered the potential to reduce the overall height of the turbines.

A ZTV has been prepared which shows that the increase in height from 149.9m tip to 180m tip has some additional visibility mainly focused on the slopes of the higher area around the site.

The additional visibility is considered to be limited.

Wirelines showing the difference between turbines at 149.9m to tip and 180m to tip were shown and copies will be provided. During the call we looked at The Tap o' Noth, The Buck and Glass.

The existing turbines are 110m and the difference in scale to the proposed turbines is understood to be a concern to AC.

The purpose of presenting the information was not to seek additional comment from Nature Scot NS or AC but to advise them on the process Vattenfall have been through following feedback to consider the potential for smaller turbines.

The ZTV and wirelines will be provided to NS and AC.

Wild cat update

There has been ongoing work to consider the potential to provide habitat enhancement/improvement for wild cat in the wider area. This has been delayed by covid and lack of opportunity to visit the local area.

Work has been undertaken to identify land owners who may be receptive to habitat improvements on their land which would be beneficial to wild cats. It seems that there are some land owners who would be willing to engage in the process and this is being progressed. The next stage is some site work to look at the locations on the ground and consider what could be

done. This is due to be undertaken before Christmas.

Committee consideration

Feedback from the AC EHO on noise is awaited and is expect around the 20th November. The content of this feedback will need to be considered. Depending on the outcome it maybe sensible to delay the consideration of the application by the area committee in December. If it is possible to reach agreement on noise prior to committee this would be preferred.

It is understood that agreement on condition wording with the MOD is not crucial prior to the area committee.

It is understood that currently the area committees are being recorded and it is possible to view them on YouTube after the event. The Infrastructure Committee maybe live streamed.

It is possible for the applicant to present to the area committee – usually a 5 minute slot.

Advance notice is required for this

AOB

It is agreed that there is no requirement at this stage for the Clashindarroch II application to take account of the Clashindarroch Extension application which is currently the subject of scoping.

Please do not hesitate to get in touch with any further questions which you may have.

Kind regards

Alison

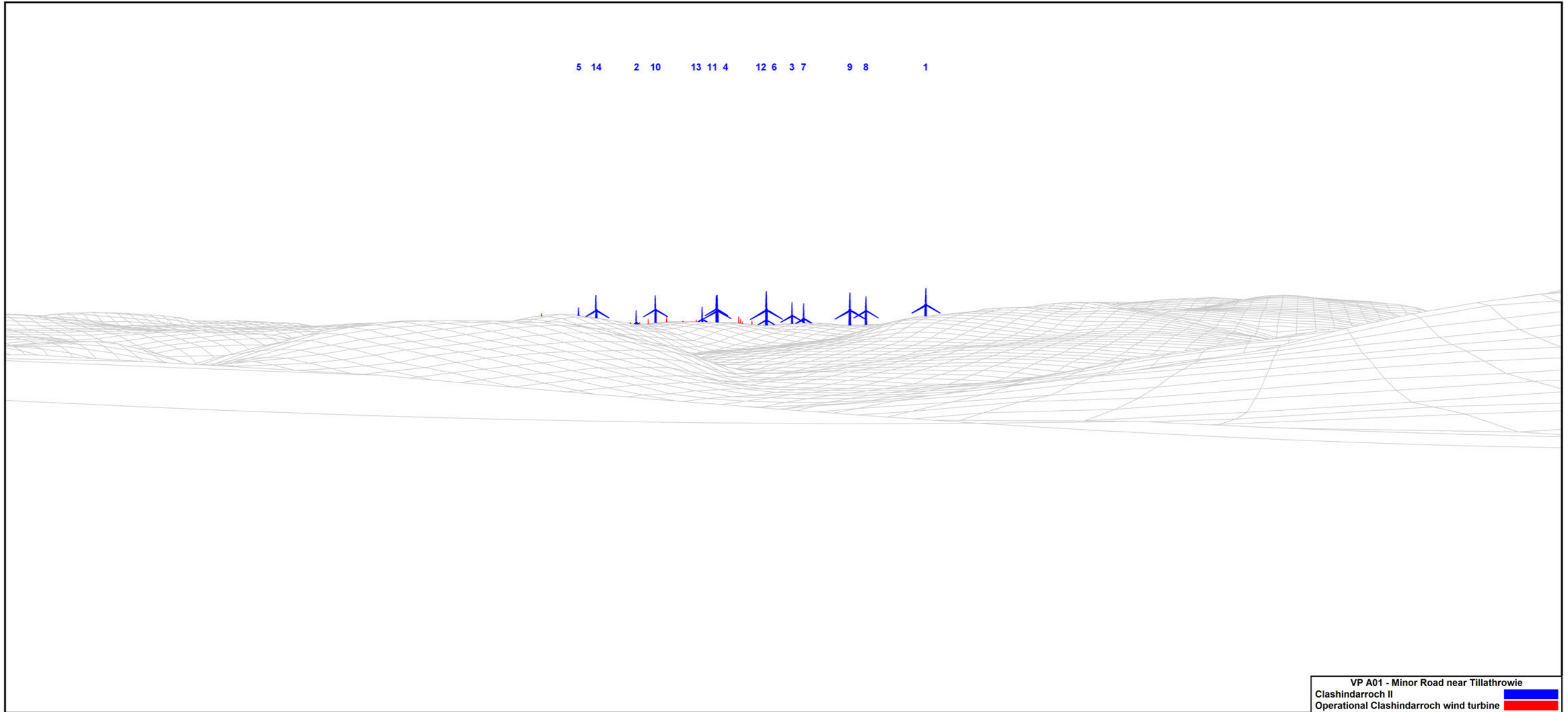
Alison Sidgwick
Technical Director (Planning)




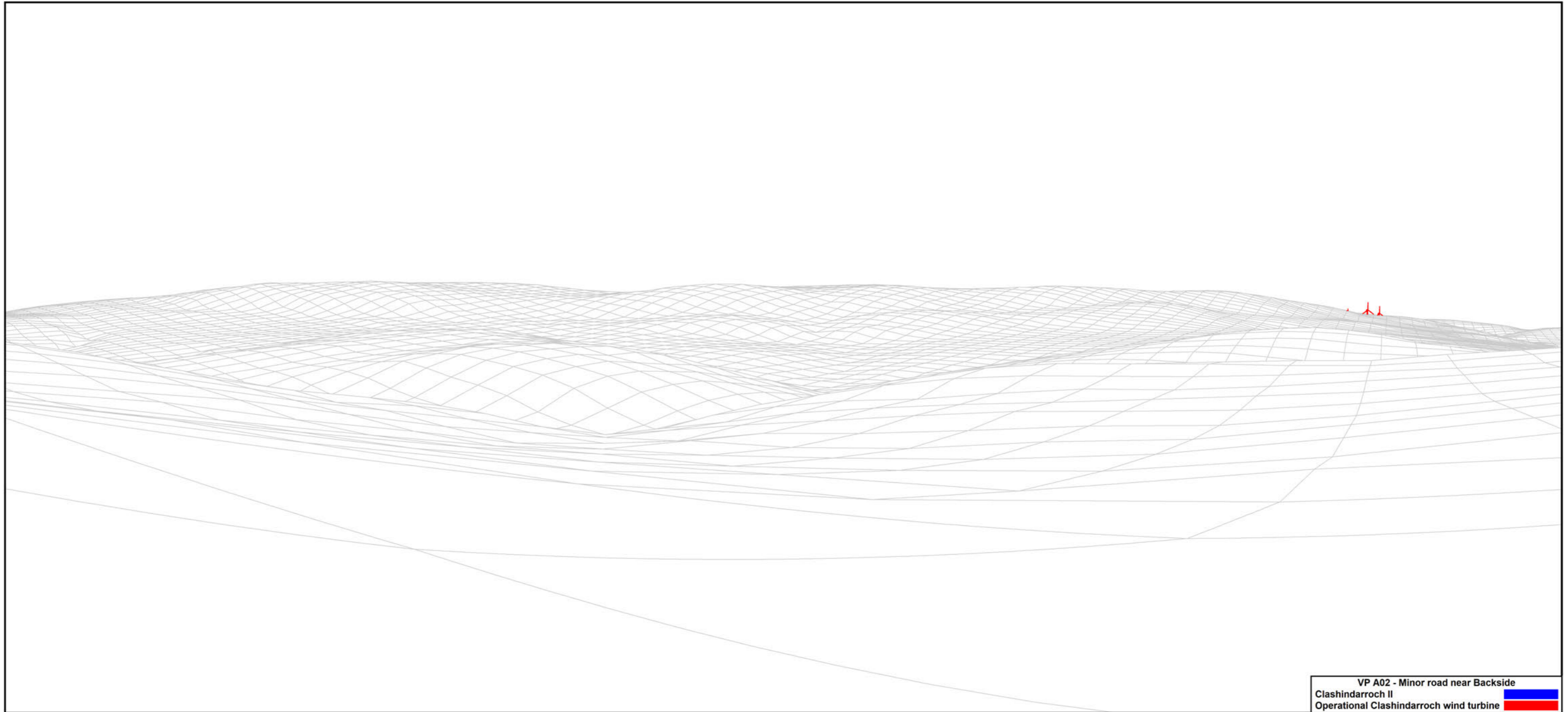
Stephenson Halliday
23 Melville Street
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0131 314 2770
www.stephenson-halliday.com

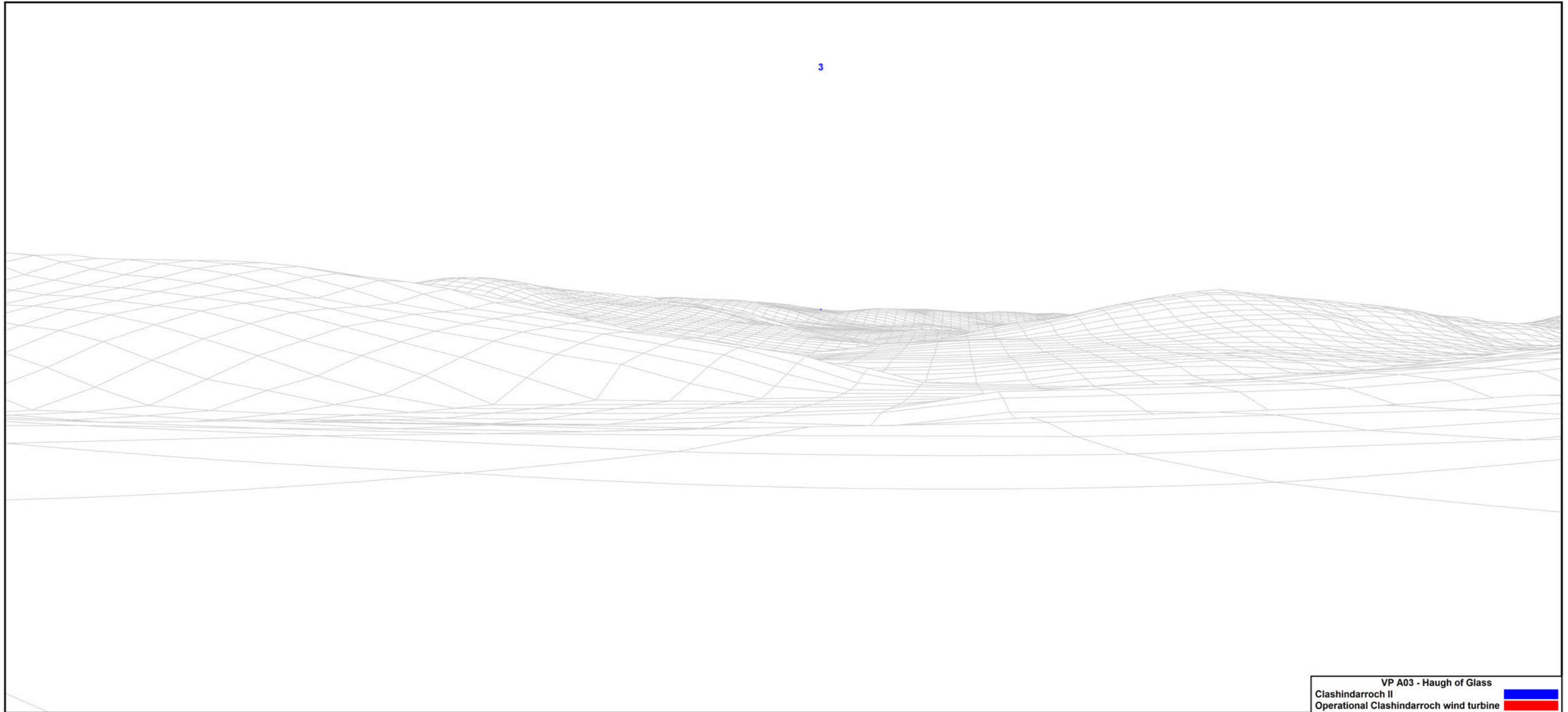
Please note that my usual working days are Monday – Thursday

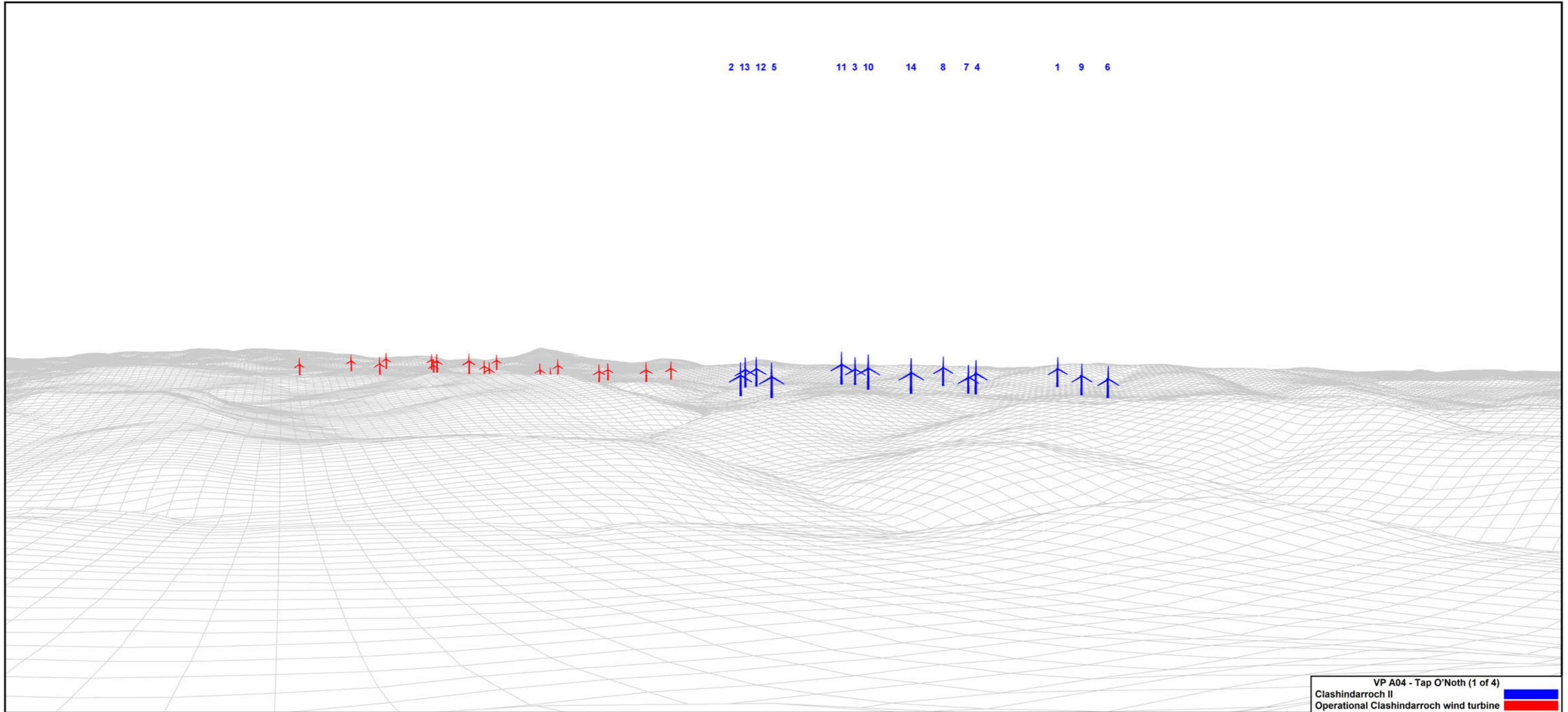
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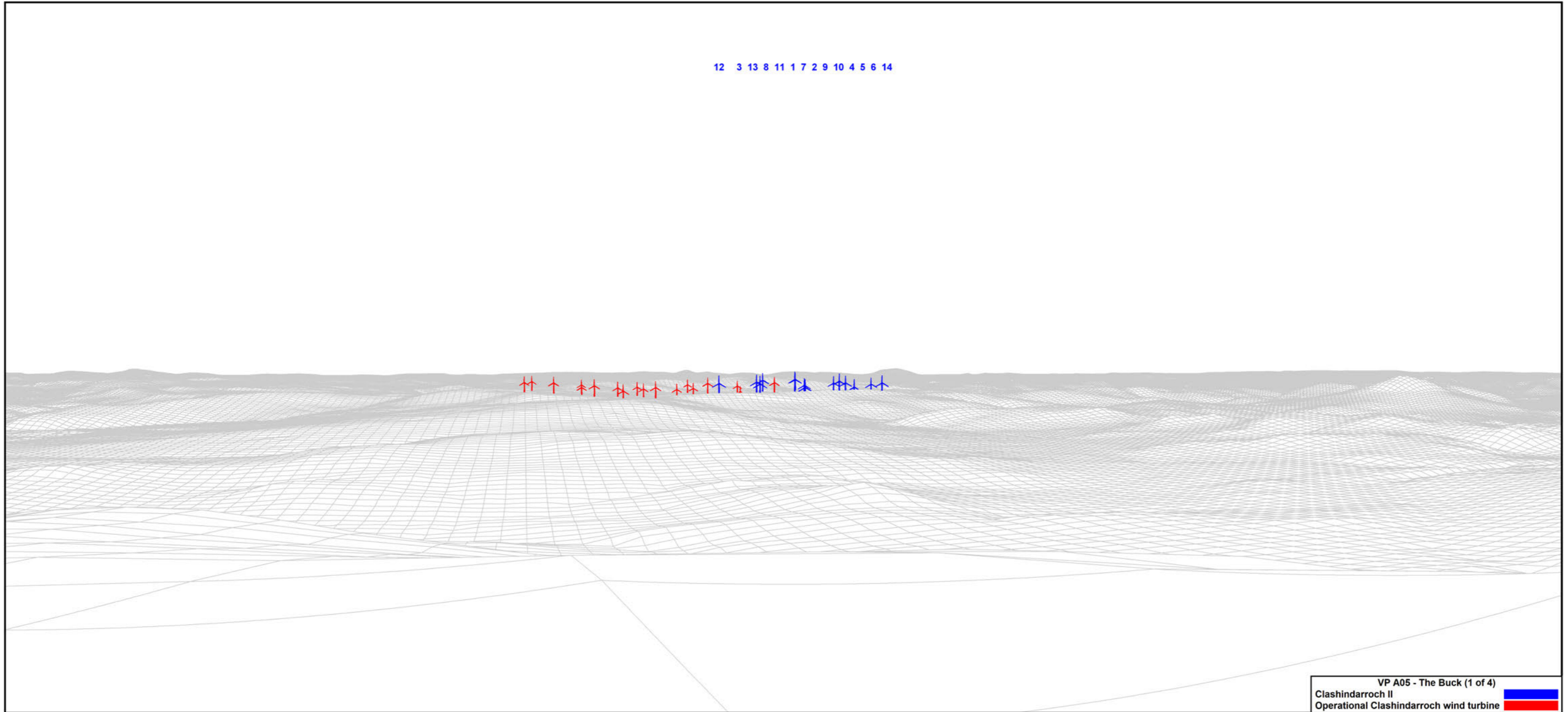


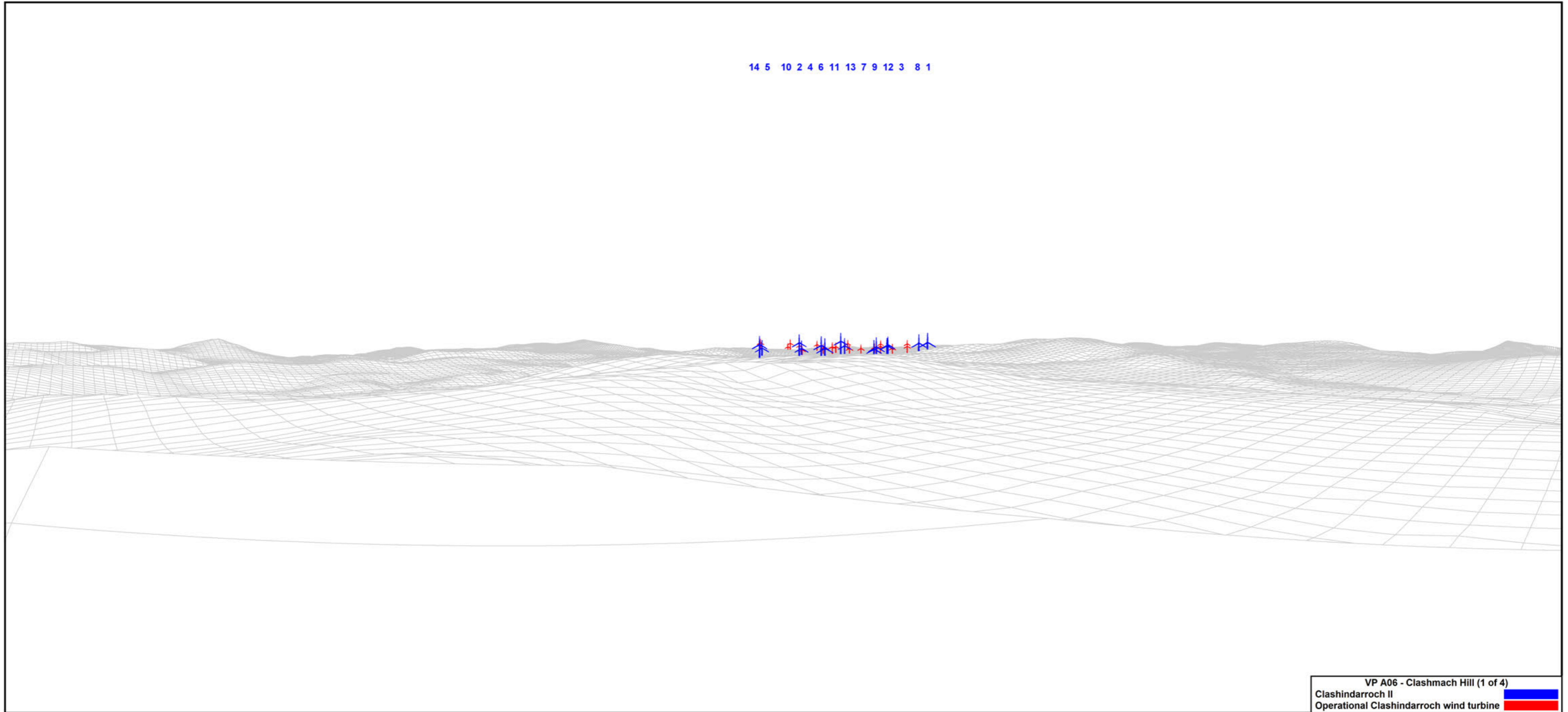
VP A01 - Minor Road near Tillathrowie
Clashindarroch II
Operational Clashindarroch wind turbine 

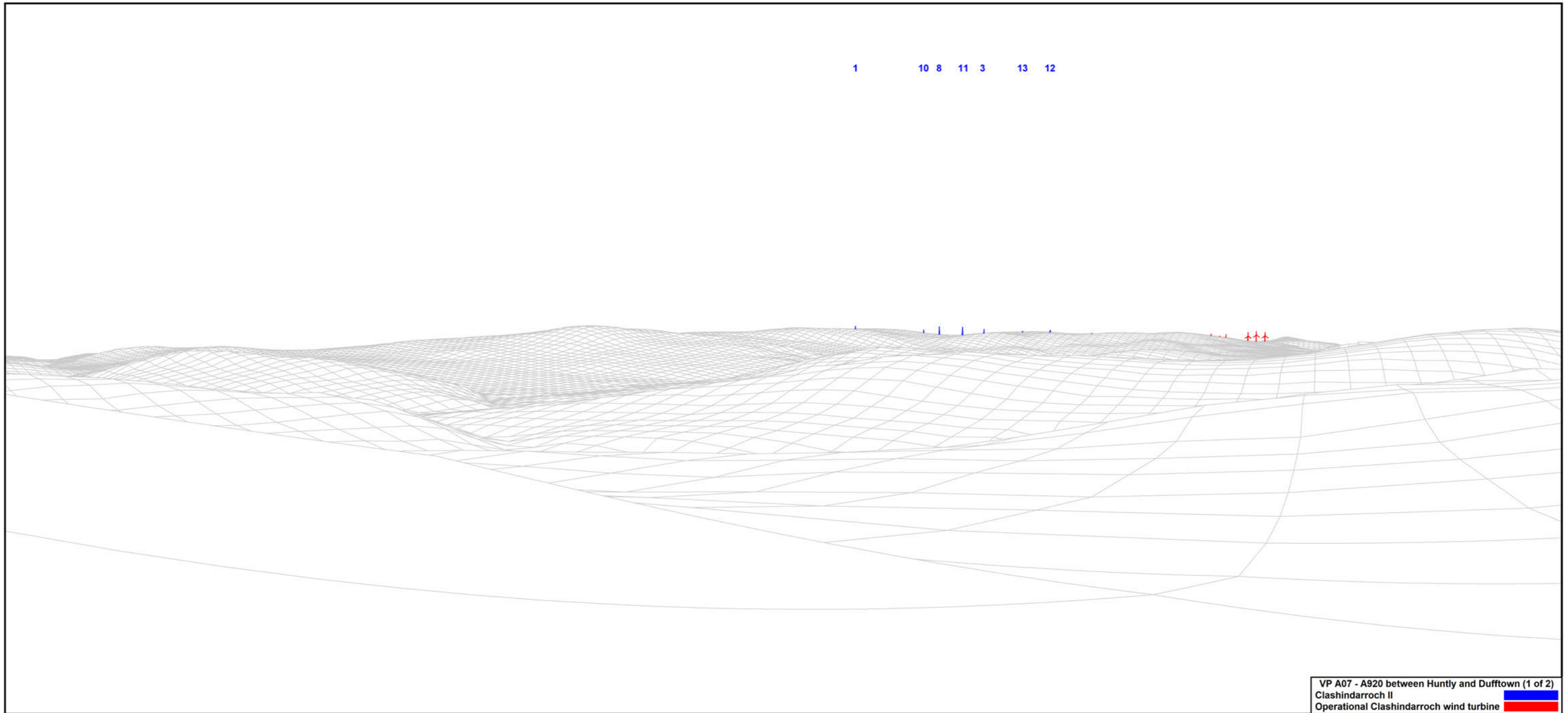


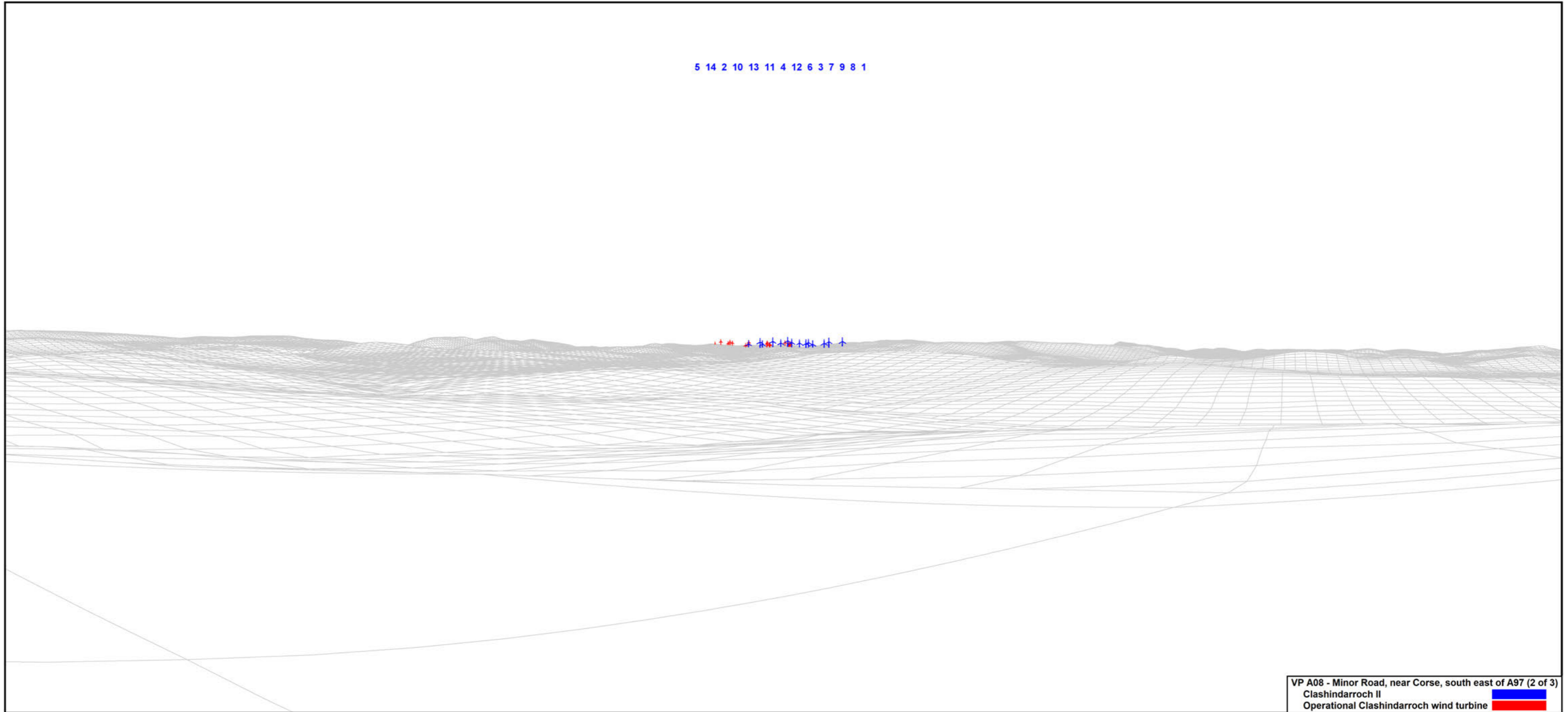


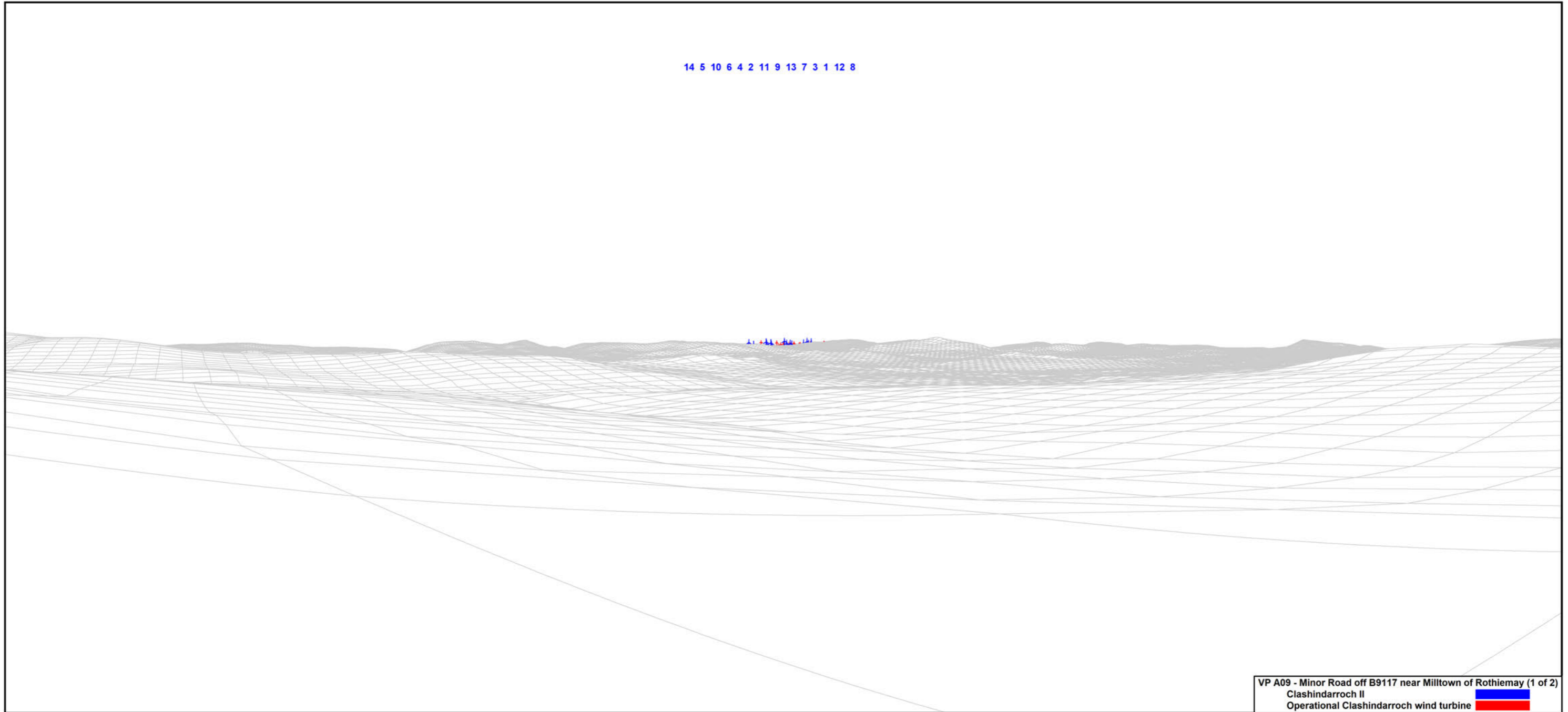


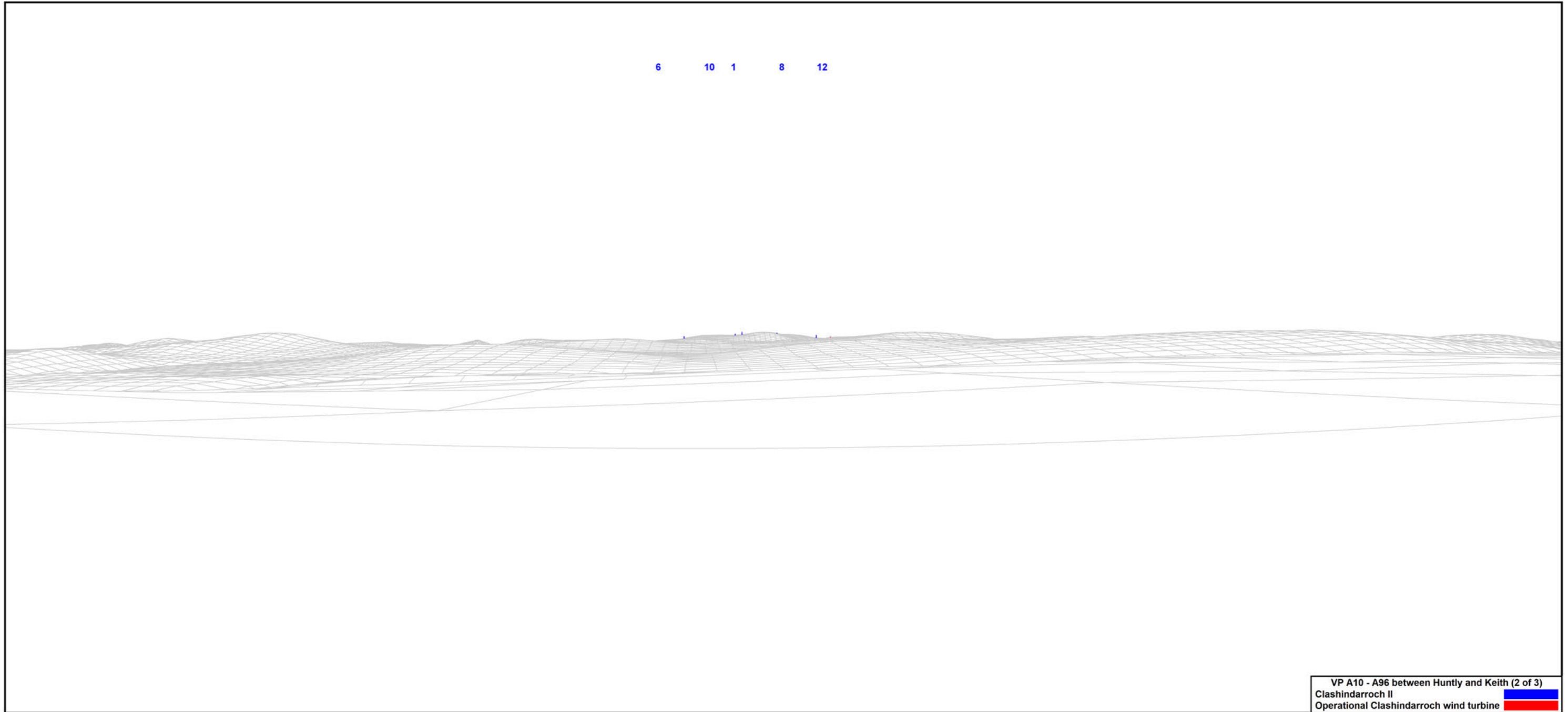


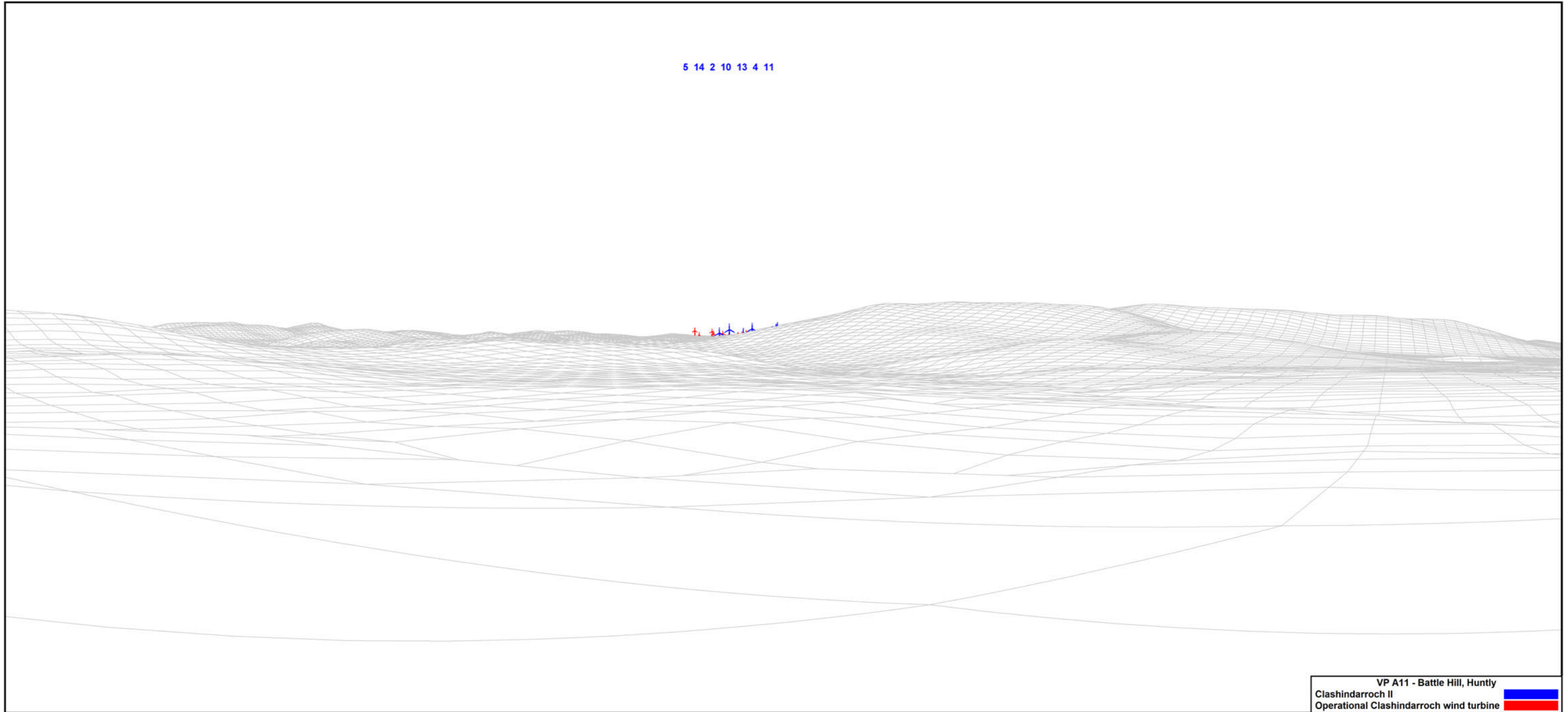


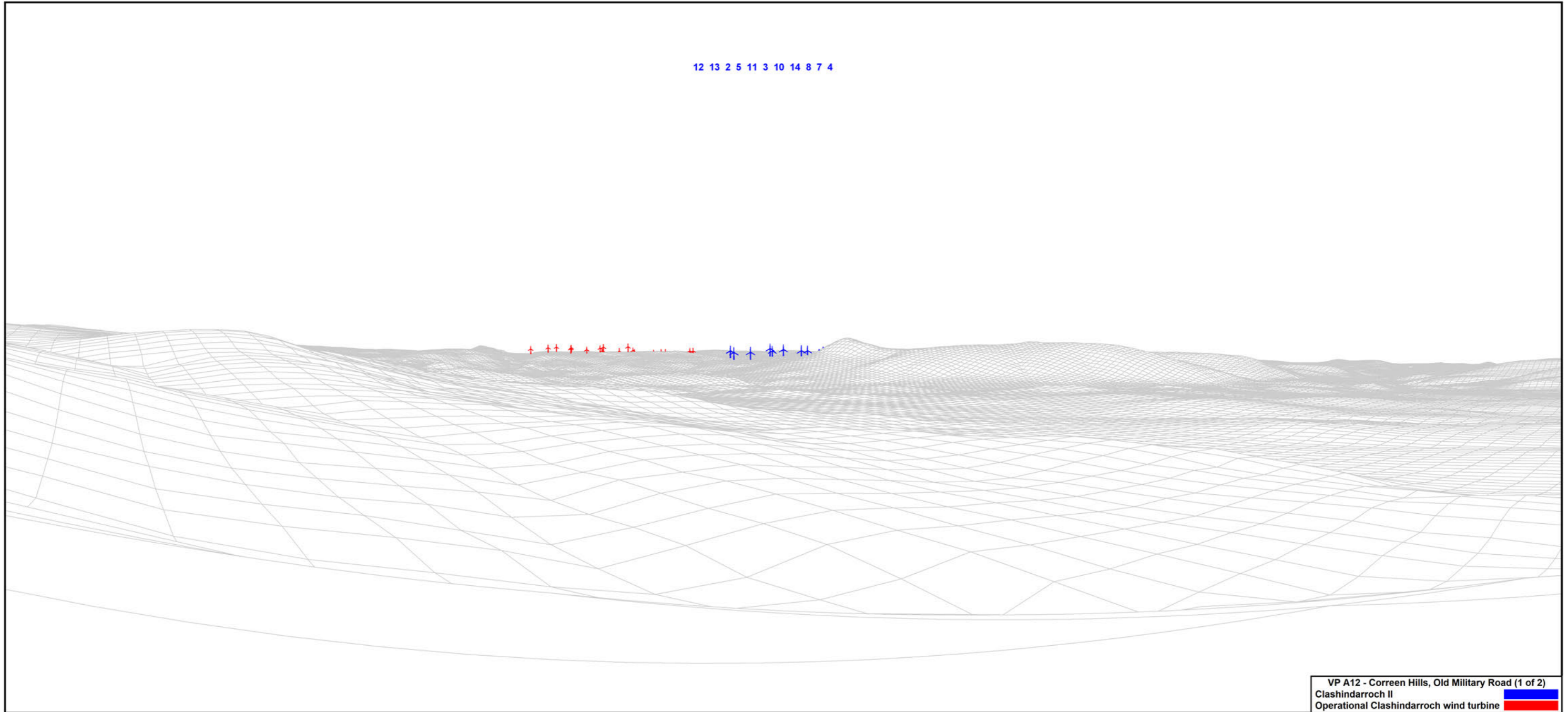




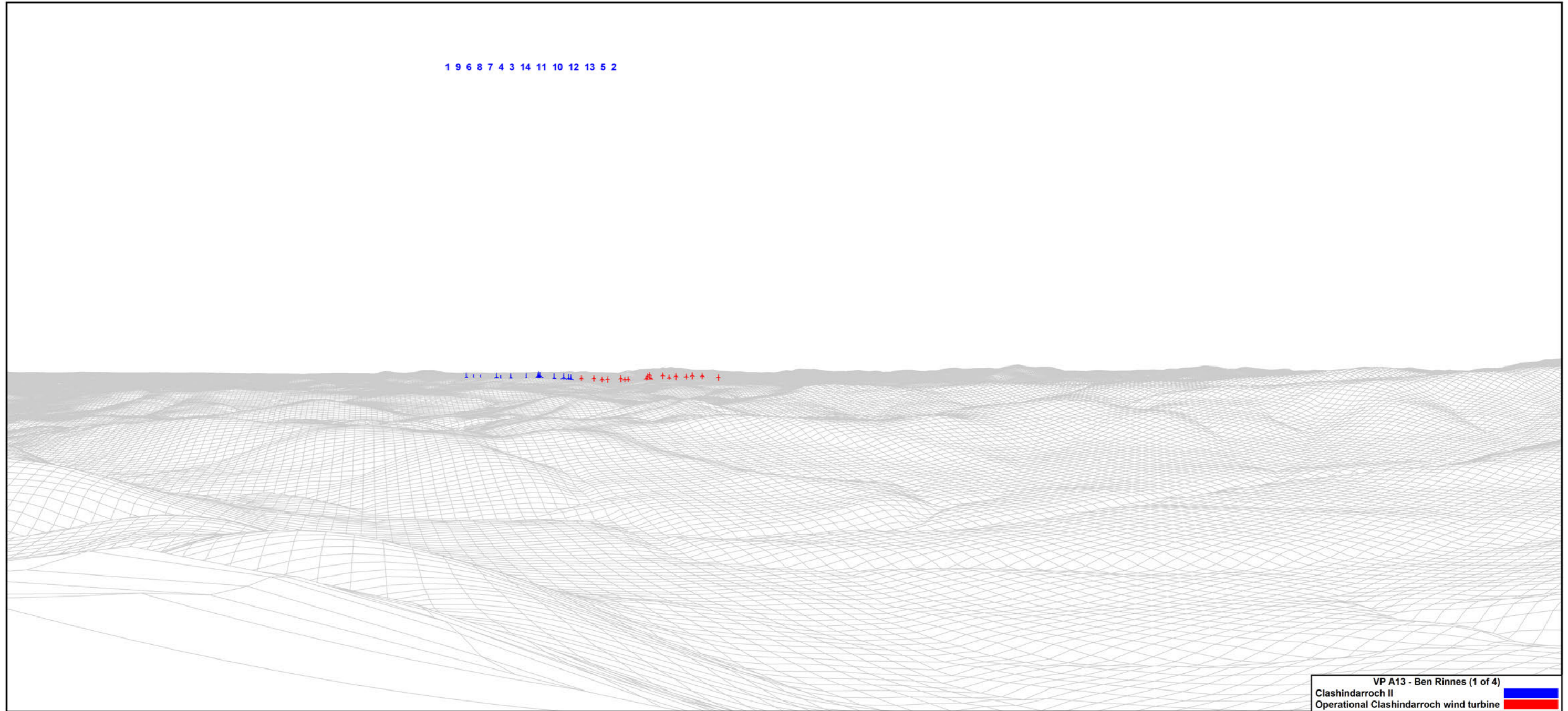








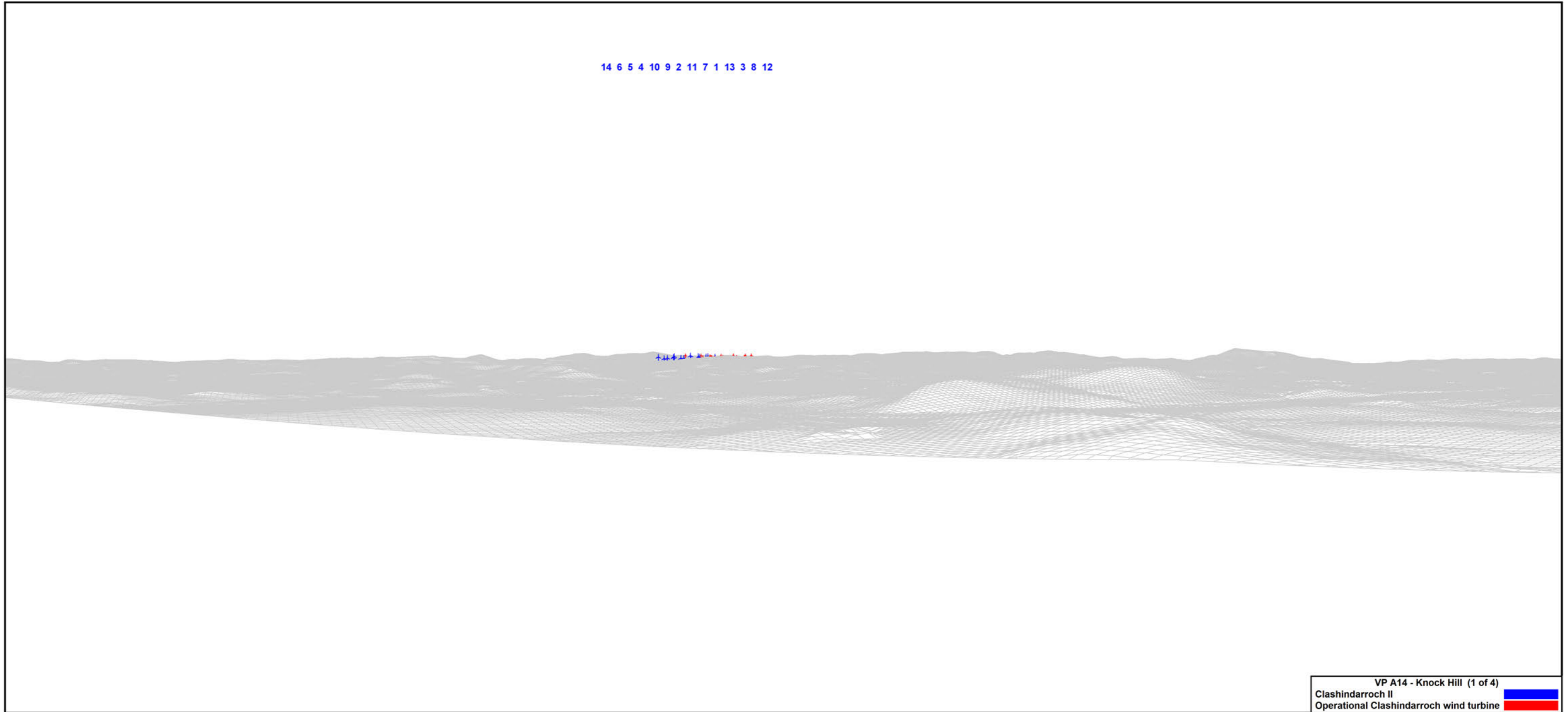




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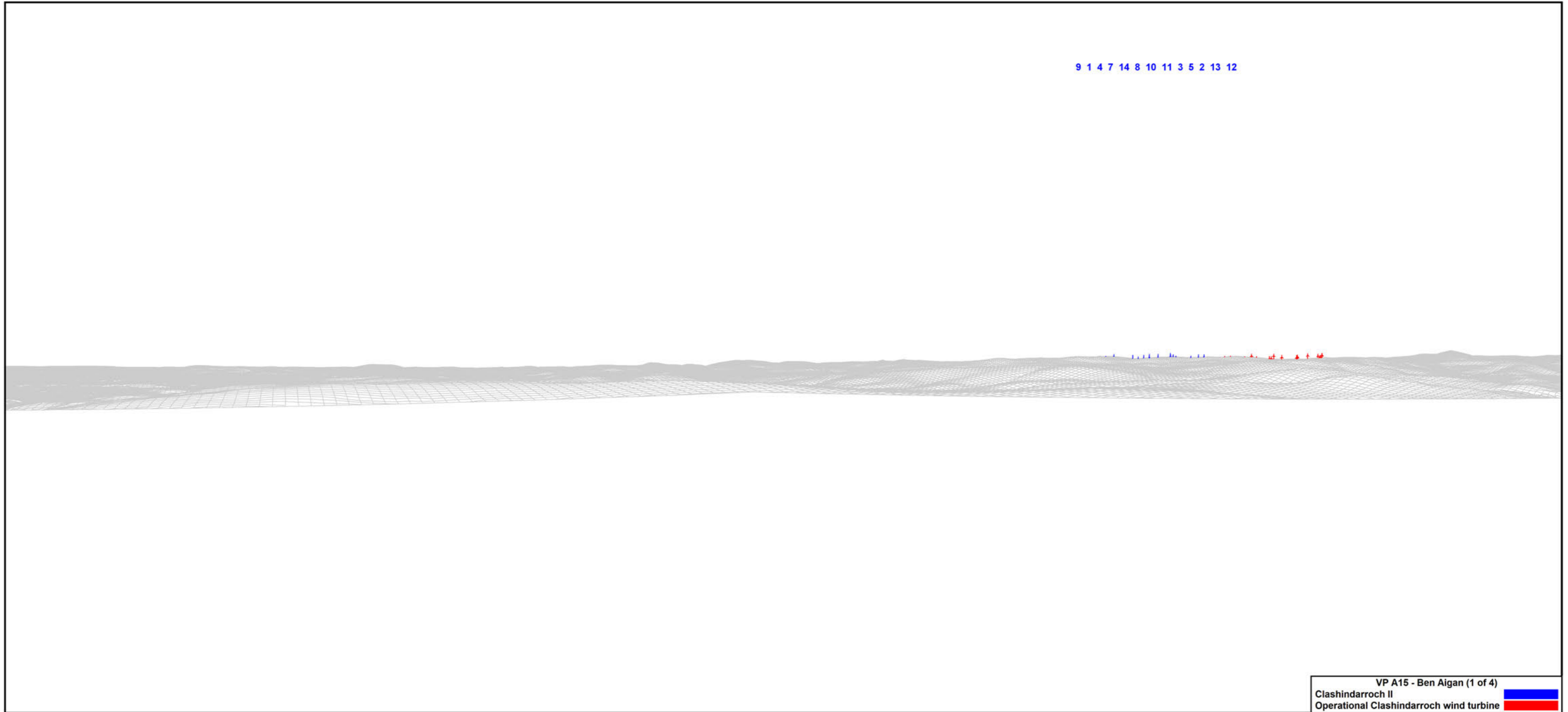


VP A13 - Ben Rinnes (1 of 4)
Clashindarroch II 
Operational Clashindarroch wind turbine 

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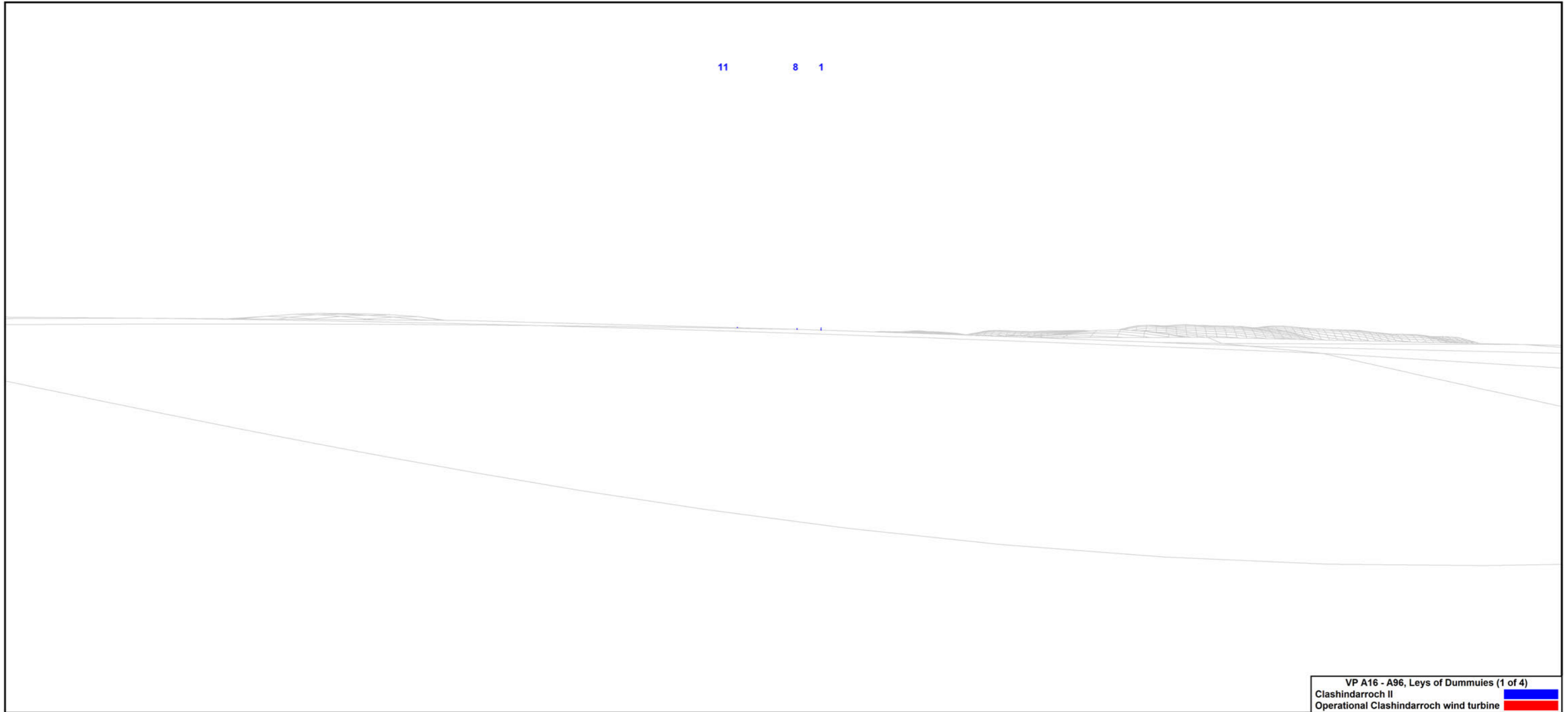


VP A14 - Knock Hill (1 of 4)
Clashindarroch II 
Operational Clashindarroch wind turbine 

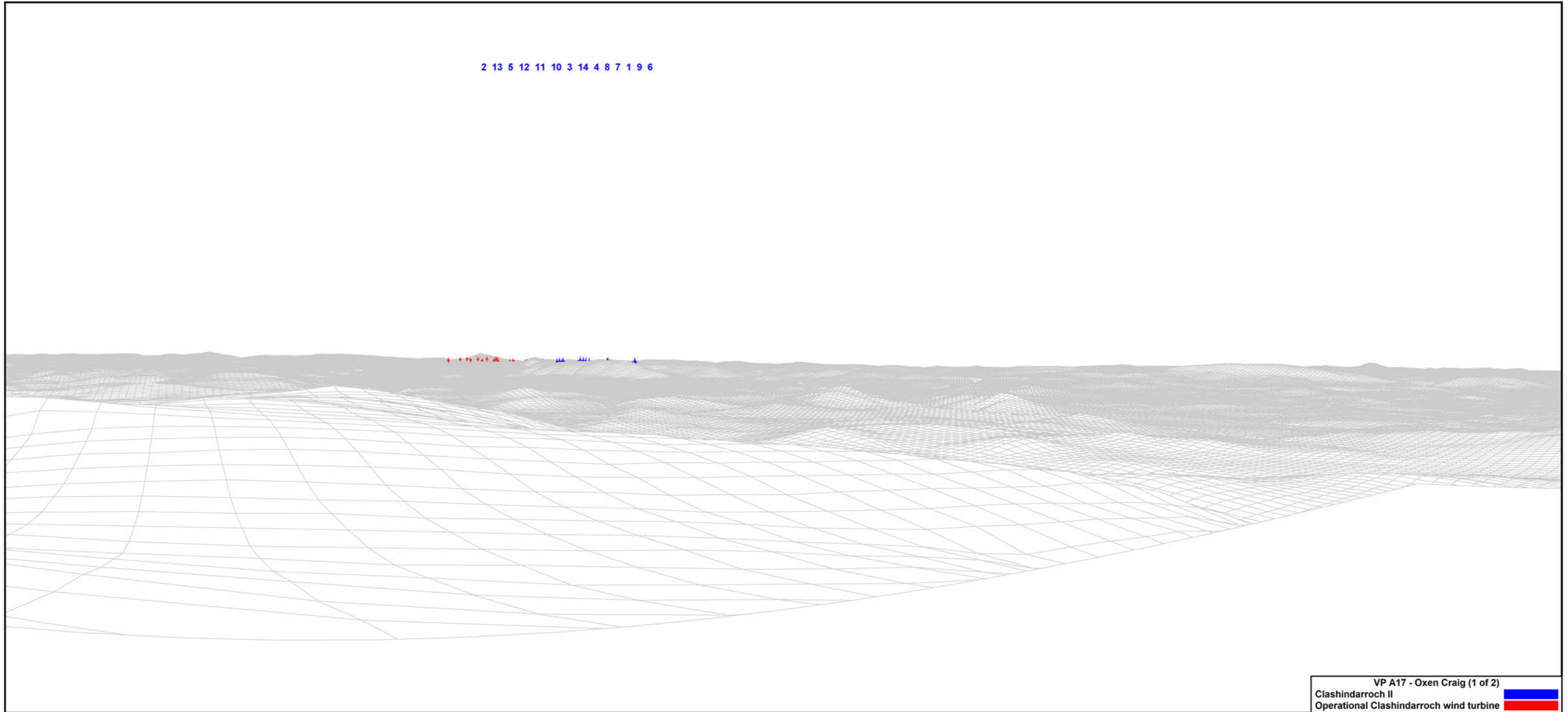




9 1 4 7 14 8 10 11 3 5 2 13 12

VP A15 - Ben Aigan (1 of 4)
Clashindarroch II
Operational Clashindarroch wind turbine

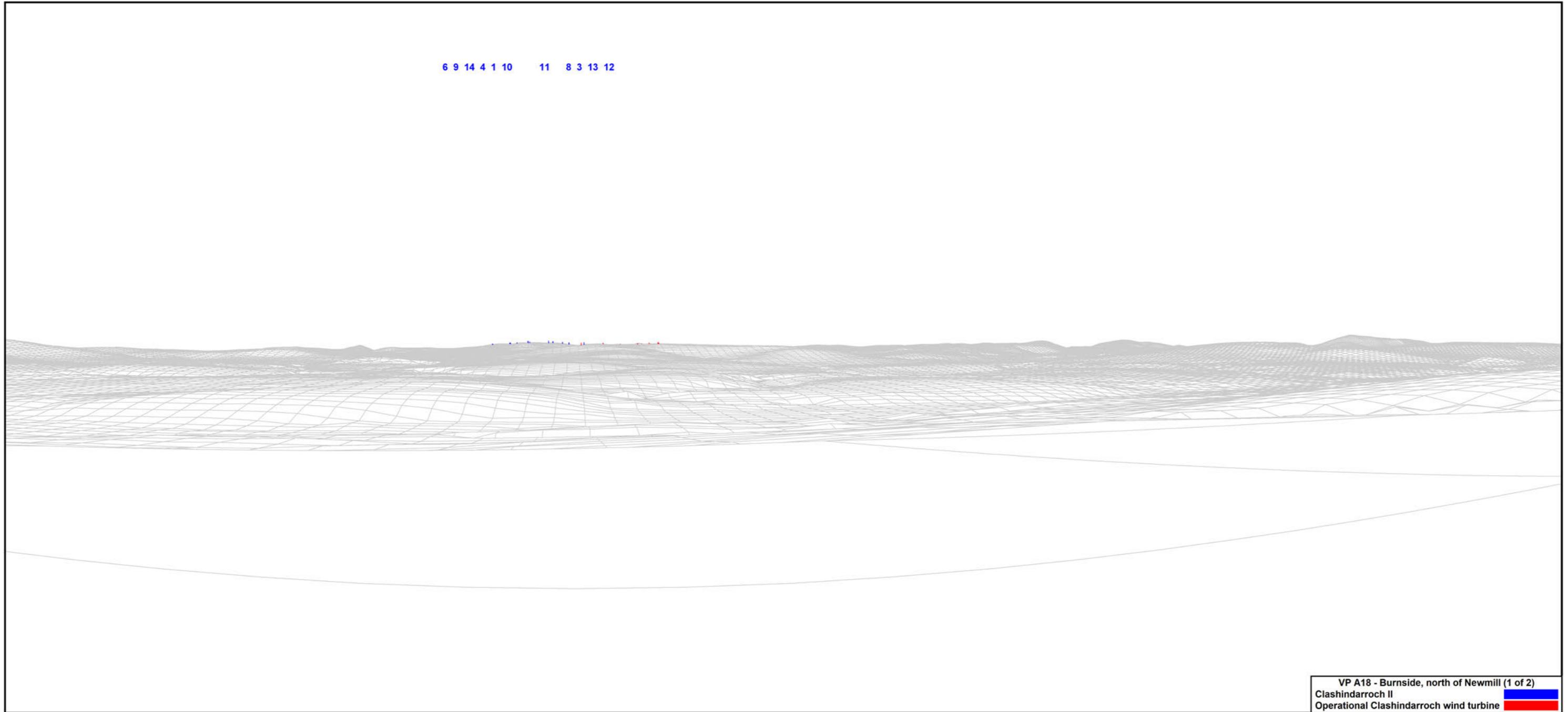


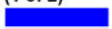

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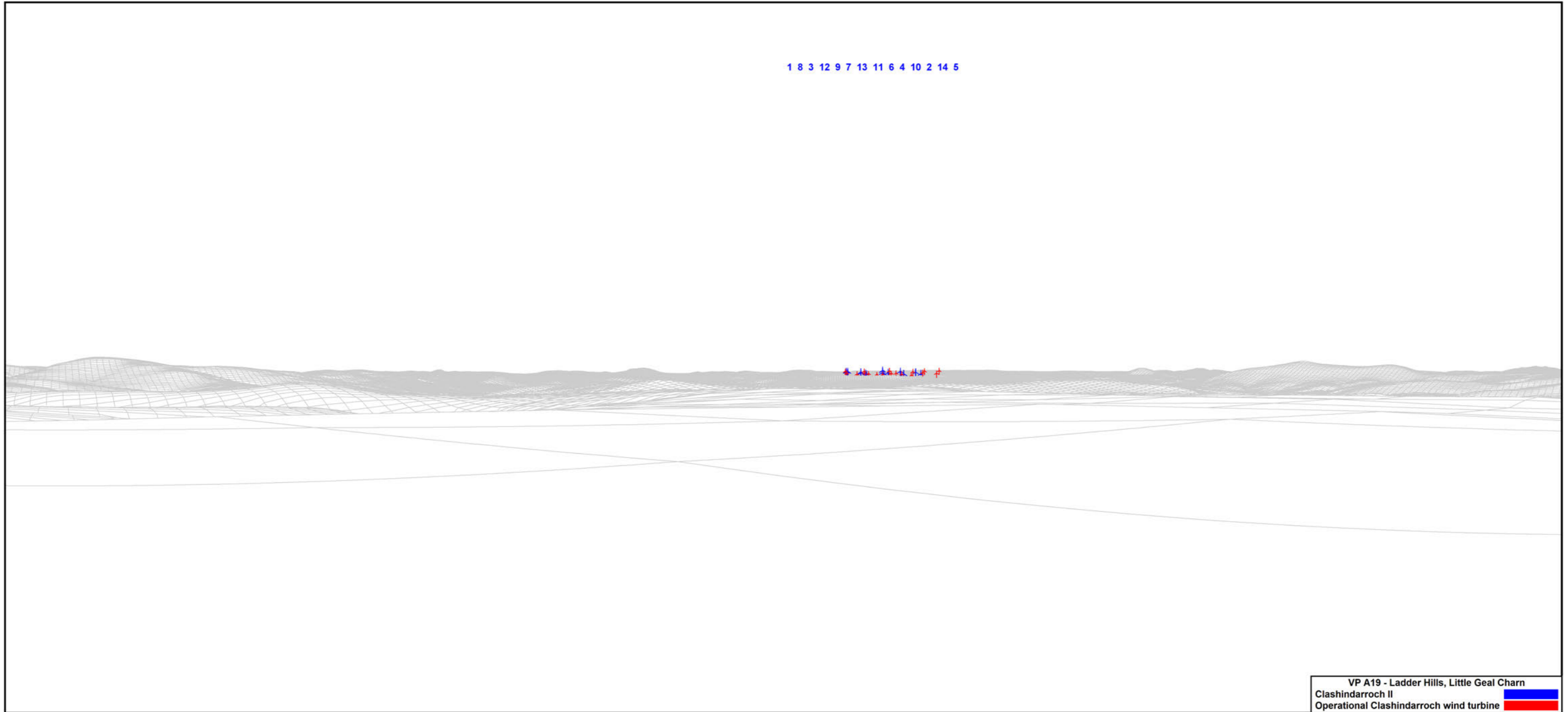


VP A17 - Oxen Craig (1 of 2)
Clashindarroch II 
Operational Clashindarroch wind turbine 

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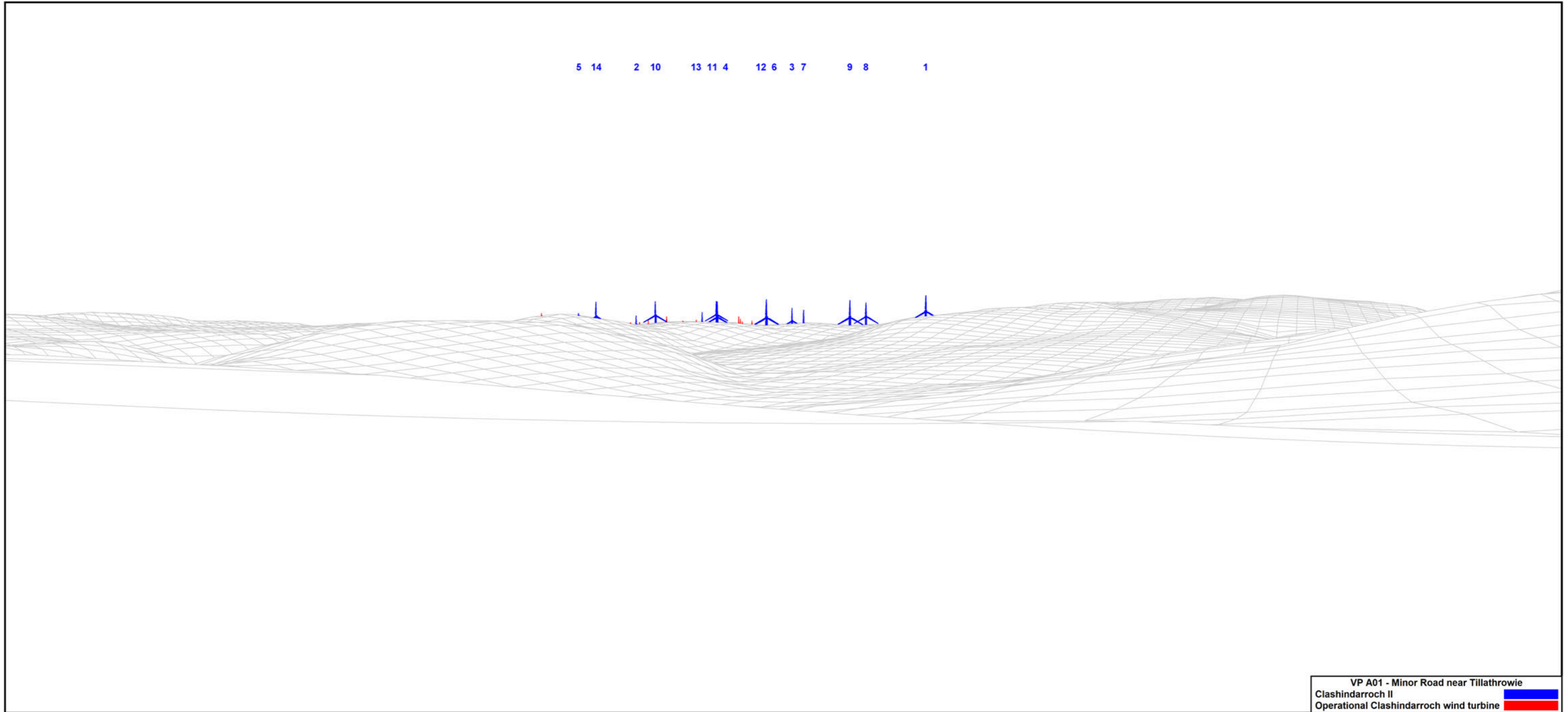


VP A18 - Burnside, north of Newmill (1 of 2)
Clashindarroch II 
Operational Clashindarroch wind turbine 



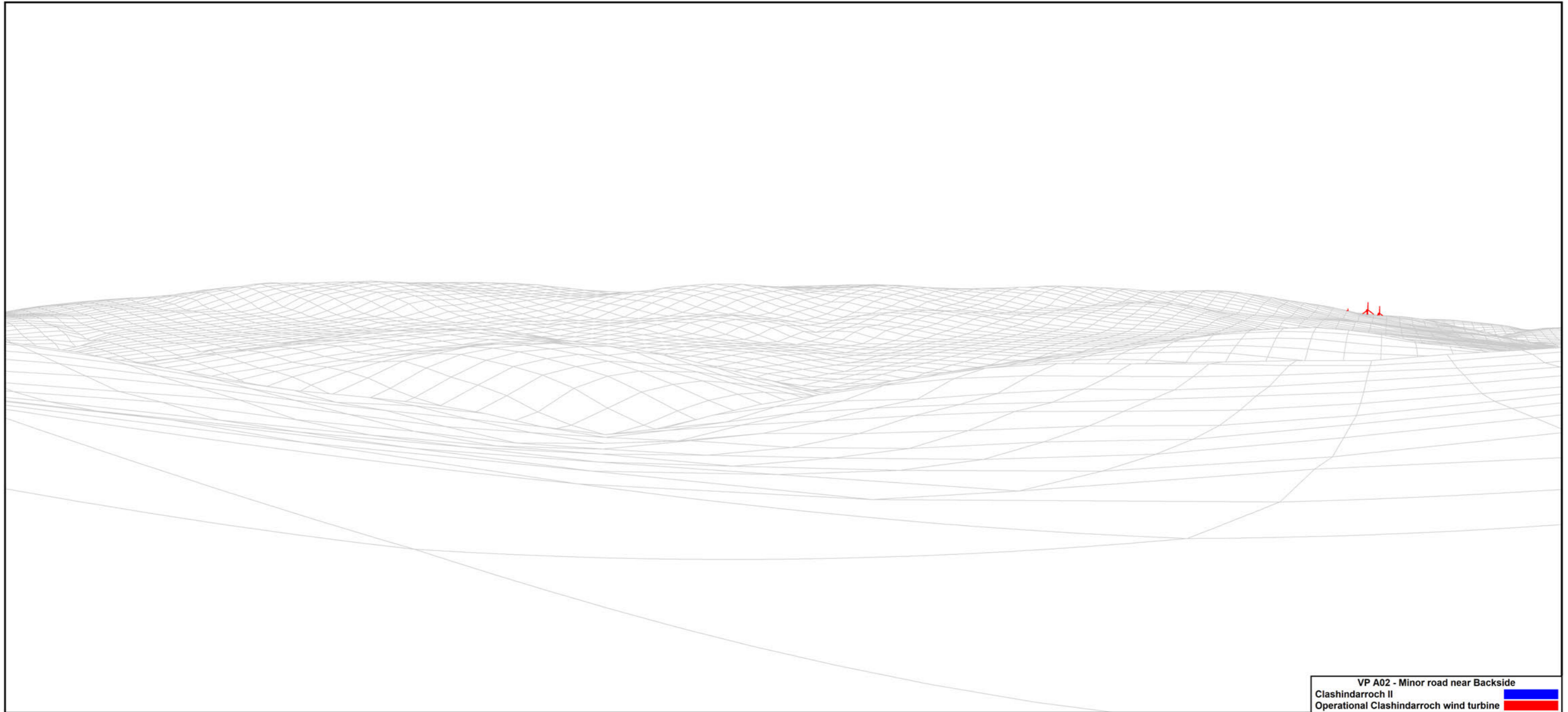


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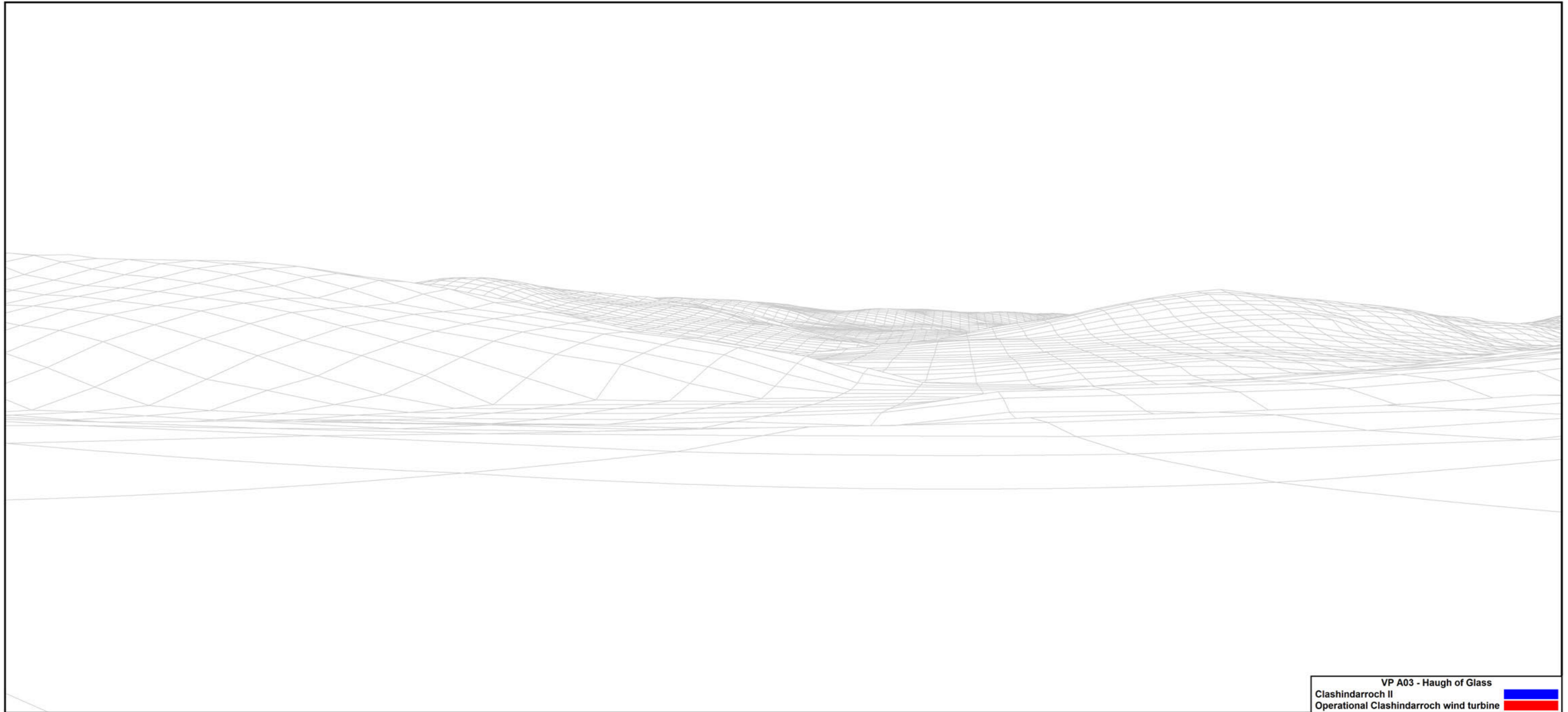
Wireframe with 90 degrees included angle. Recommended viewing distance at A3: 250 mm.
Projection: Cylindrical
Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
Ref: CLON008.GTH, VCLON009_Extract, LCLON046.WFL [Hub height: 81.9 m; Rotor diameter: 136 m],
CLASH046 [Hub height: 69 m; Rotor diameter: 82 m]
CLON-1AG-600-060-A

Wireframe calculation does not take into account any surface features, such as buildings or vegetation.
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Wireframe with 90 degrees included angle. Recommended viewing distance at A3: 250 mm.
Projection: Cylindrical
Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
Ref: CLON008.GTH, VCLON009_Extract, LCLON046.WFL [Hub height: 81.9 m; Rotor diameter: 136 m],
CLASH046 [Hub height: 69 m; Rotor diameter: 82 m]
CLON-1AG-600-061-A

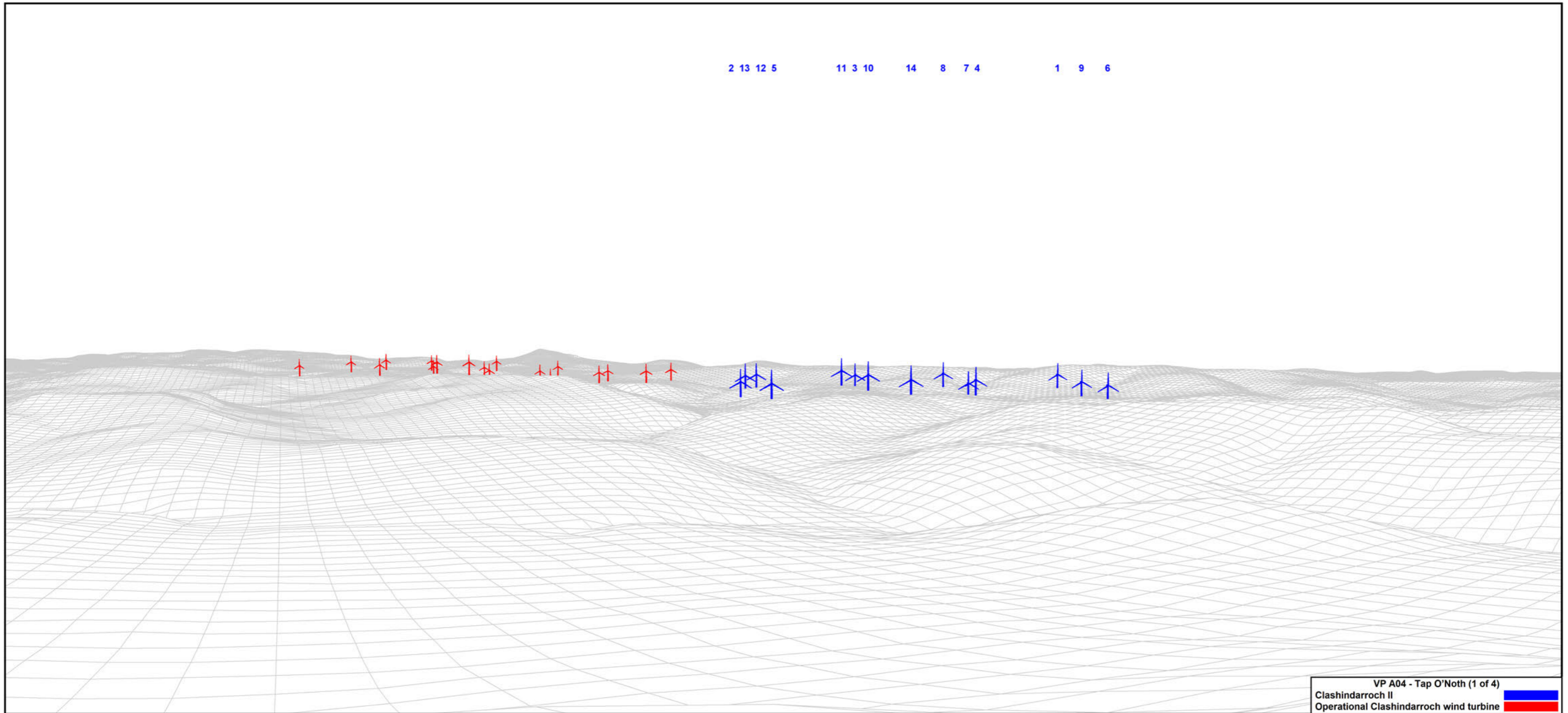
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Projection: Cylindrical
Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
Ref: CLON008.GTH, VCLON009_Extract, LCLON046.WFL [Hub height: 81.9 m; Rotor diameter: 136 m],
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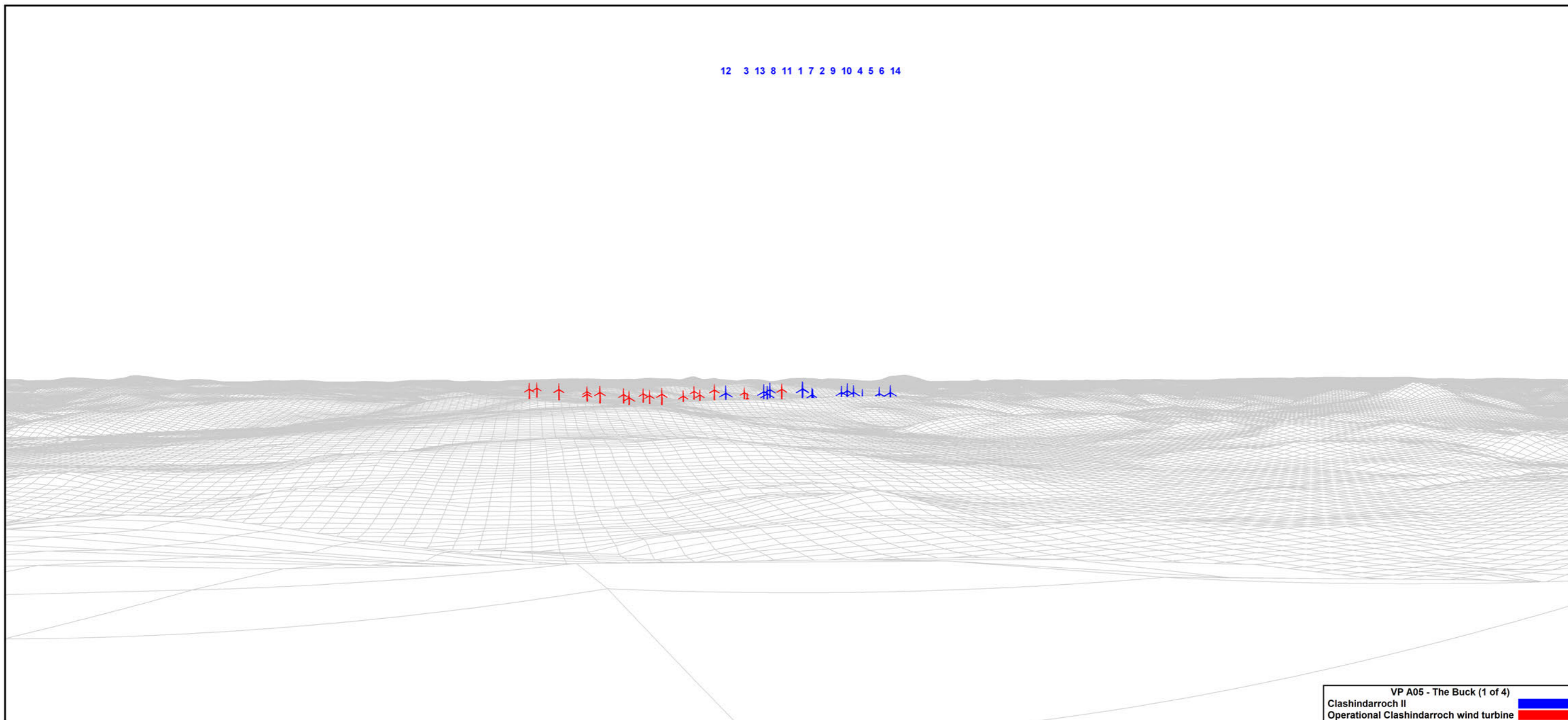
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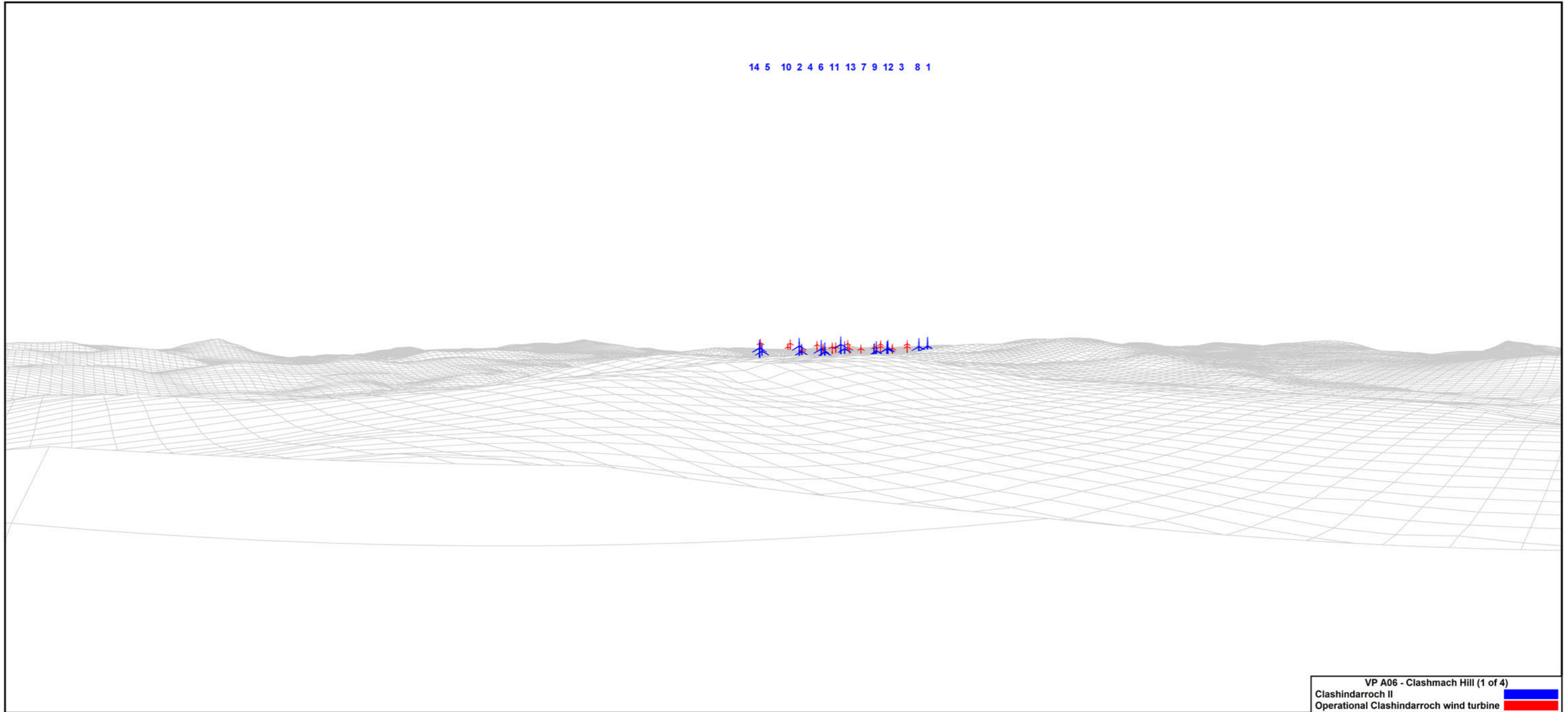


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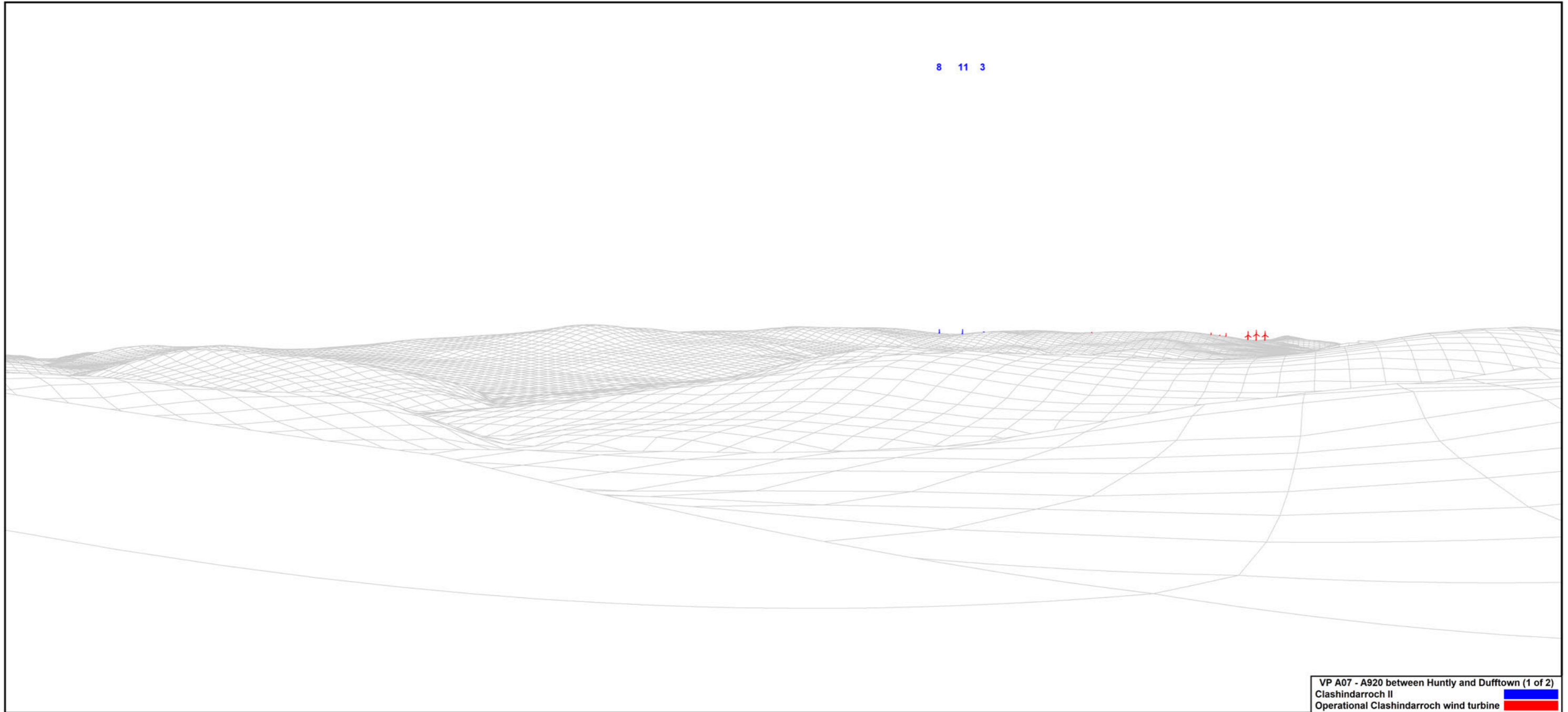
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Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
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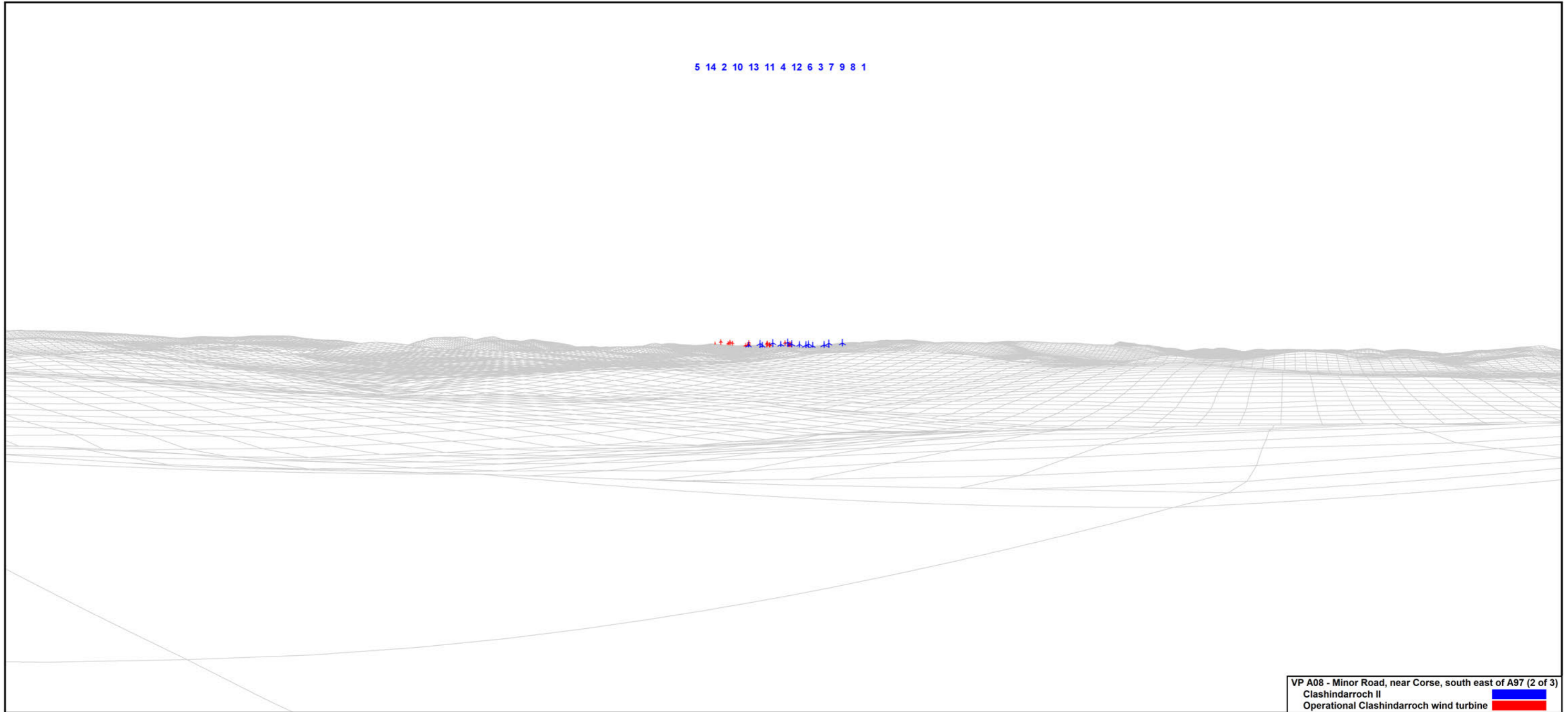
Wireframe calculation does not take into account any surface features, such as buildings or vegetation.
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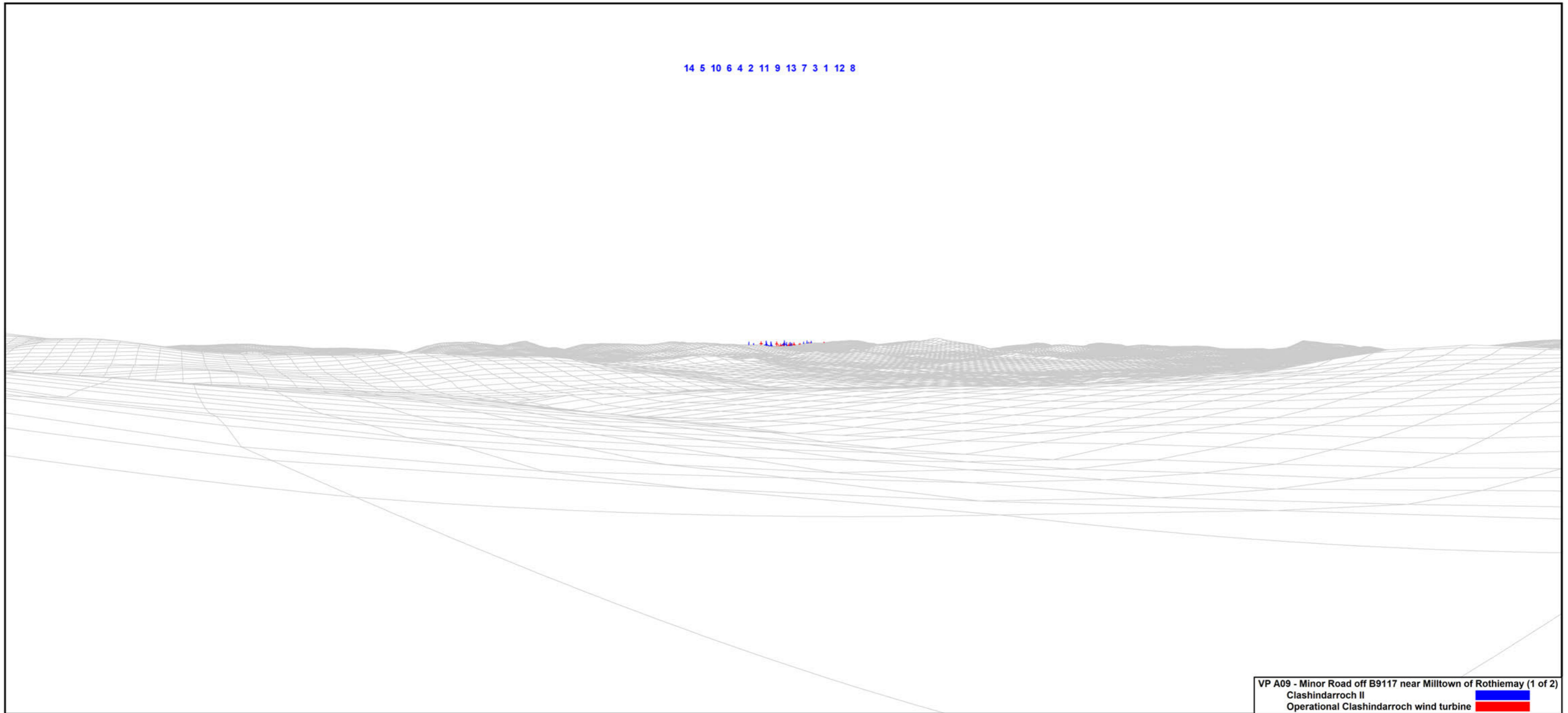
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Projection: Cylindrical
Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
Ref: CLON008.GTH, VCLON009_Extract, LCLON046.WFL [Hub height: 81.9 m; Rotor diameter: 136 m],
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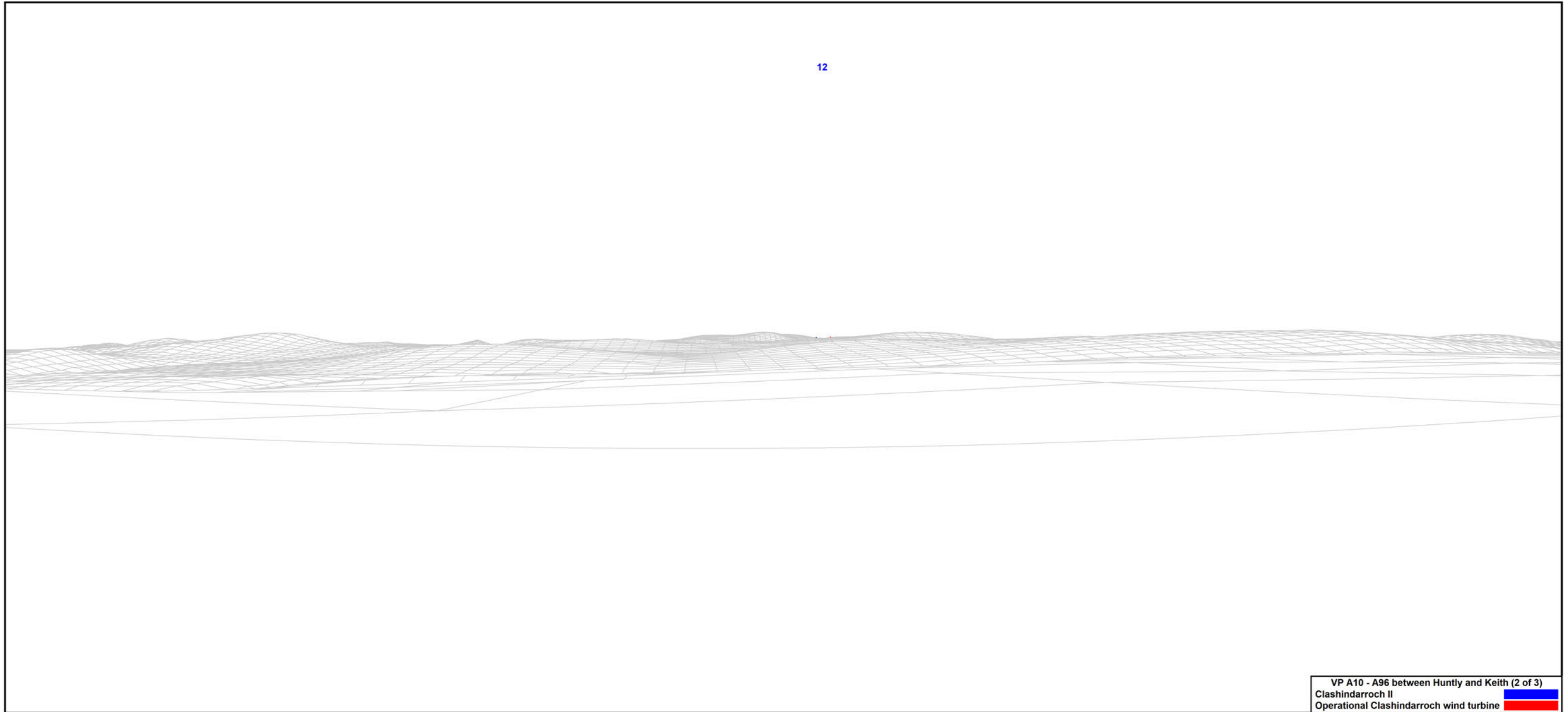
Wireframe calculation does not take into account any surface features, such as buildings or vegetation.
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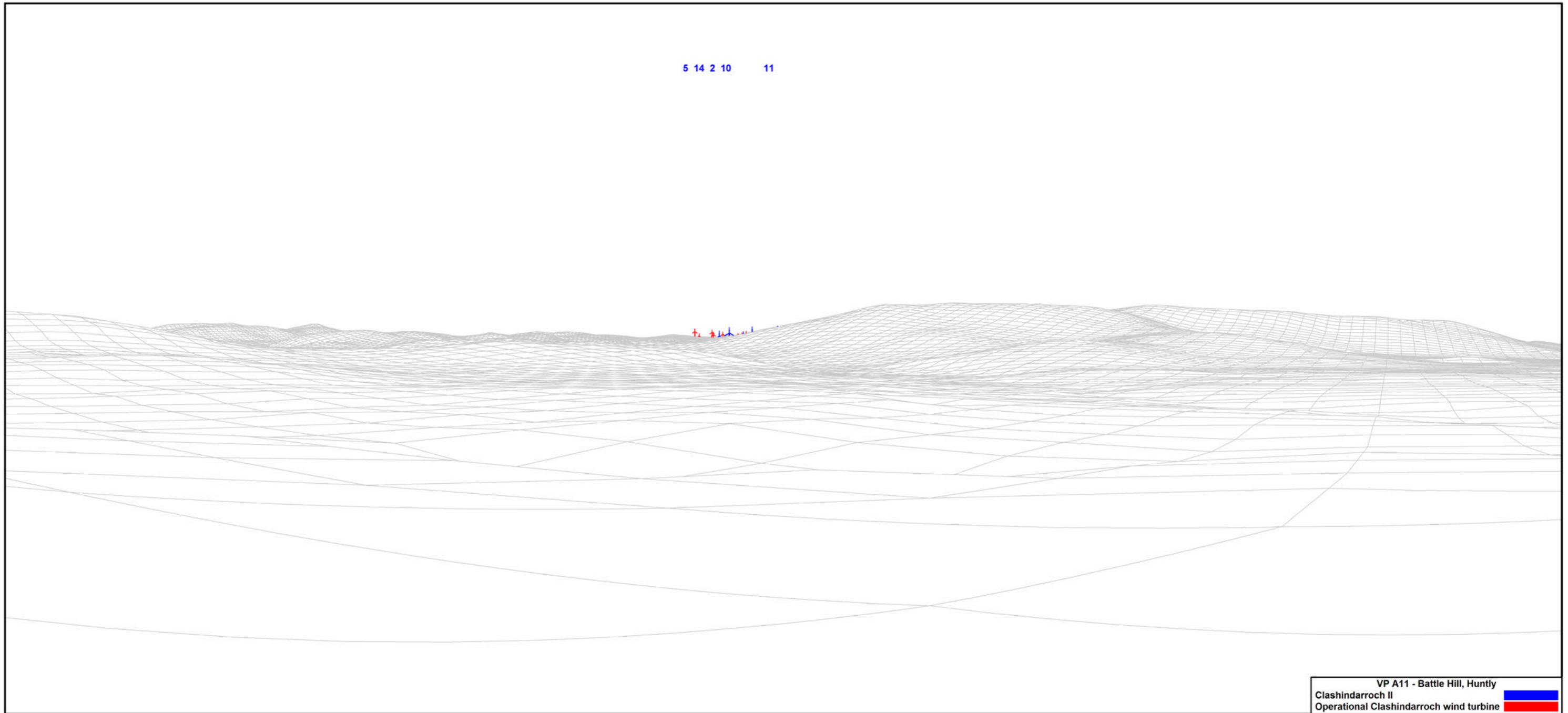


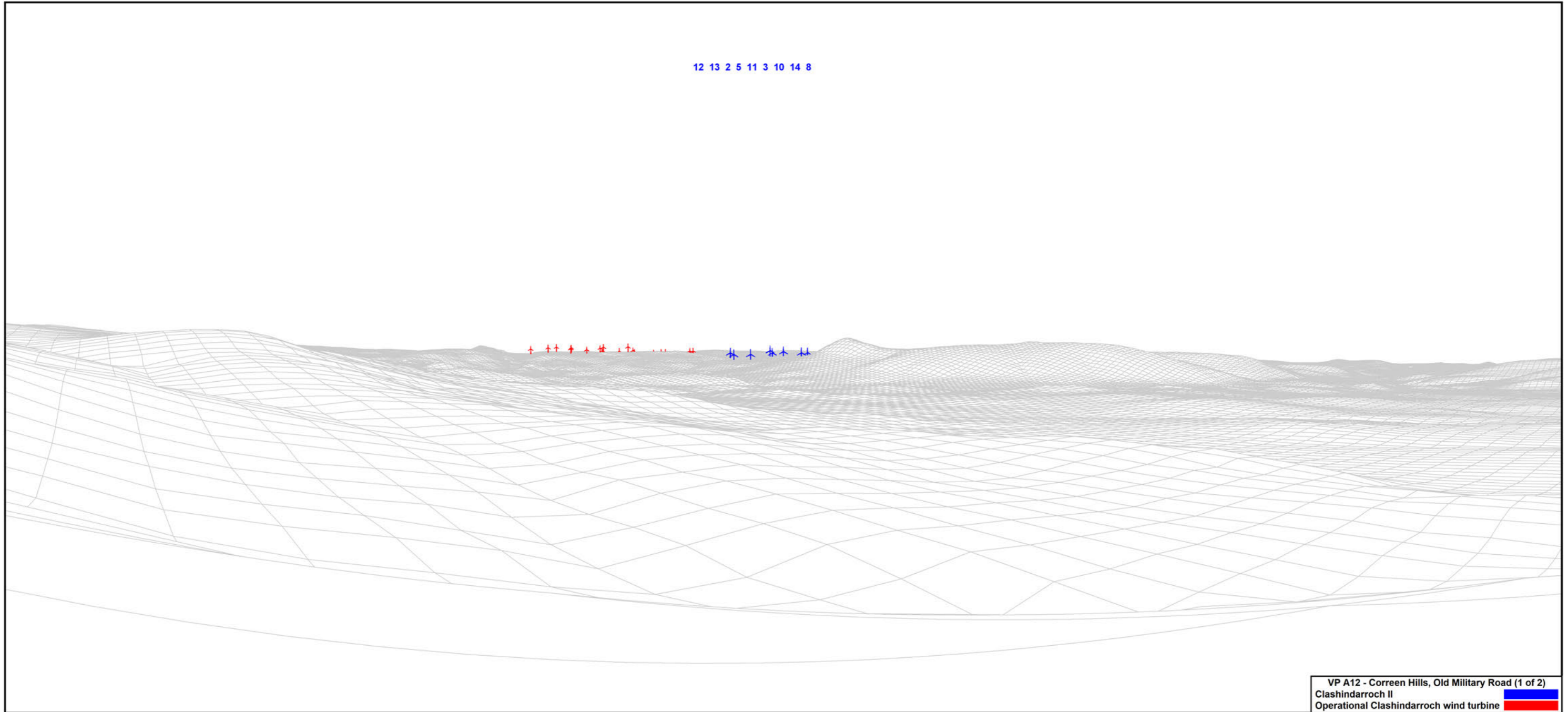
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CLON-1AG-600-068-A

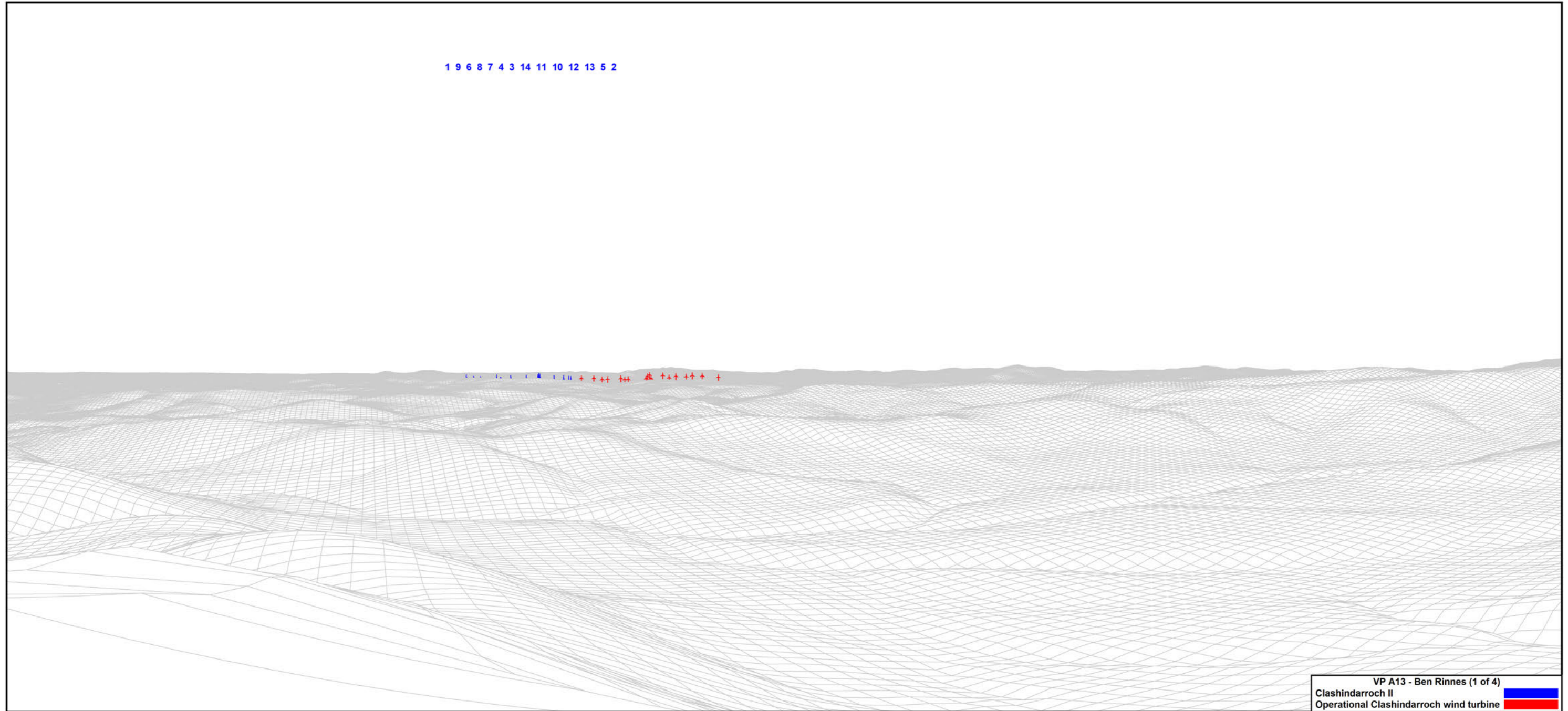
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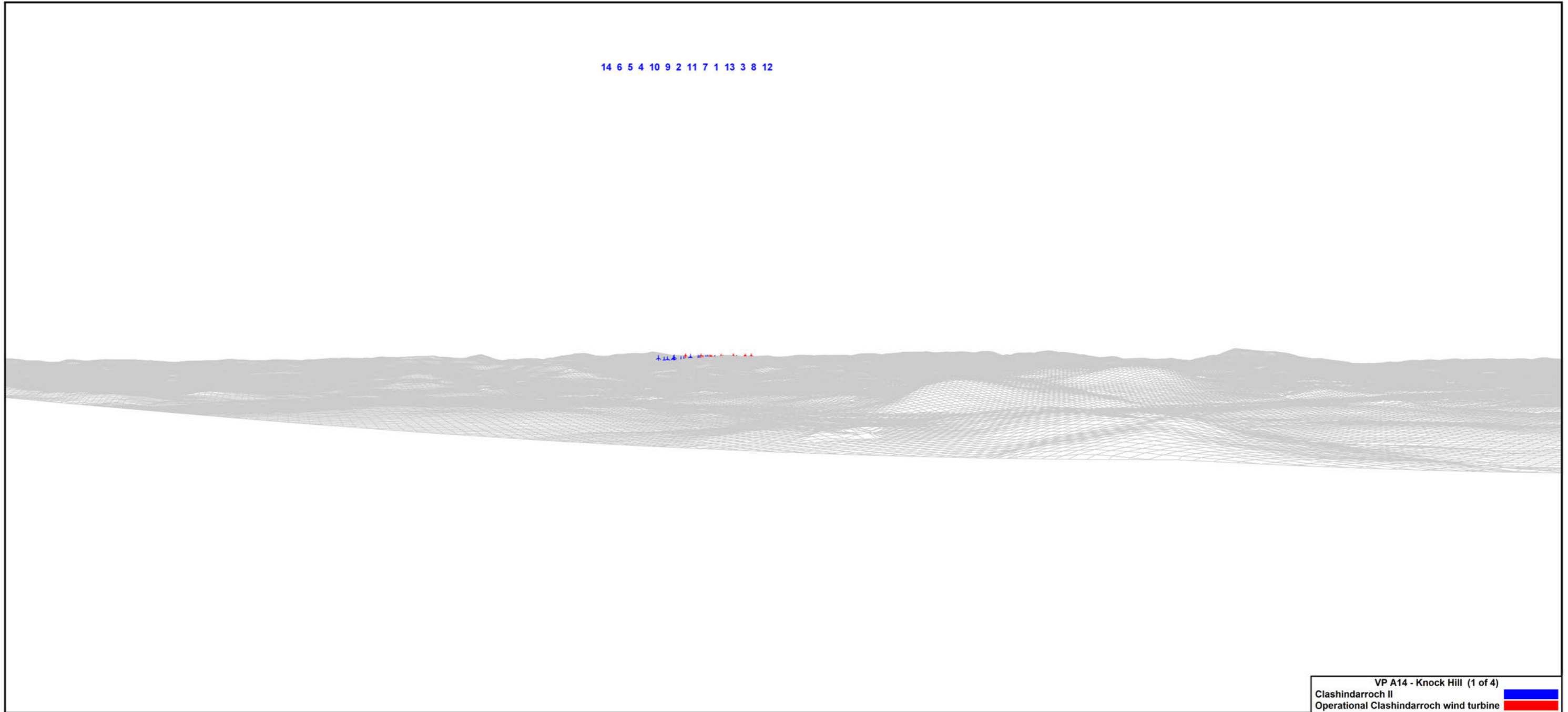




VP A13 - Ben Rinnes (1 of 4)
Clashindarroch II 
Operational Clashindarroch wind turbine

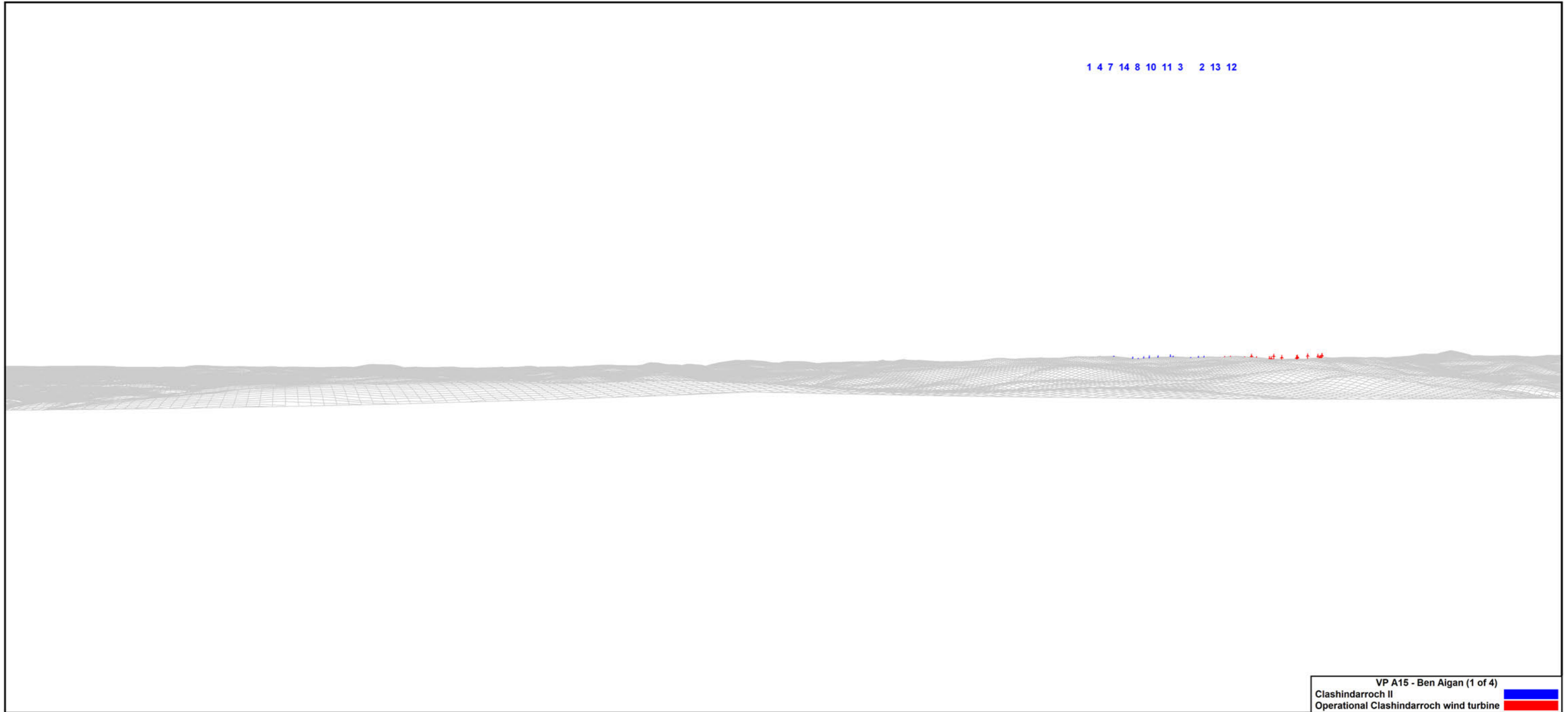
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CLASH046 [Hub height: 69 m; Rotor diameter: 82 m]
CLON-1AG-600-072-A

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14 6 5 4 10 9 2 11 7 1 13 3 8 12




VP A14 - Knock Hill (1 of 4)
Clashindarroch II 
Operational Clashindarroch wind turbine 



Wireframe with 90 degrees included angle. Recommended viewing distance at A3: 250 mm.
Projection: Cylindrical
Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
Ref: CLON008.GTH, VCLON009_Extract, LCLON046.WFL [Hub height: 81.9 m; Rotor diameter: 136 m],
CLASH046 [Hub height: 69 m; Rotor diameter: 82 m]
CLON-1AG-600-074-A

Wireframe calculation does not take into account any surface features, such as buildings or vegetation.
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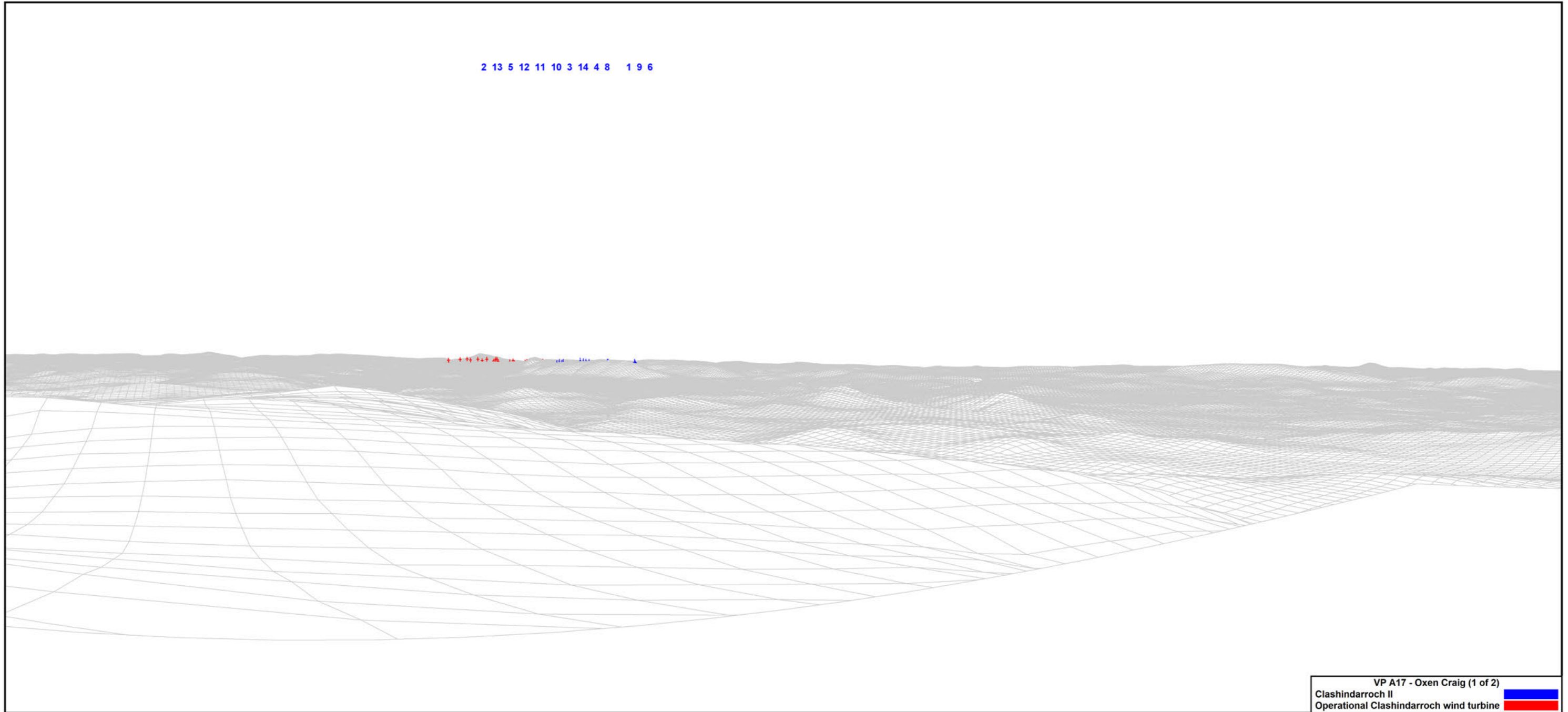




VP A16 - A96, Leys of Dummuies (1 of 4)
Clashindarroch II
Operational Clashindarroch wind turbine 

Wireframe with 90 degrees included angle. Recommended viewing distance at A3: 250 mm.
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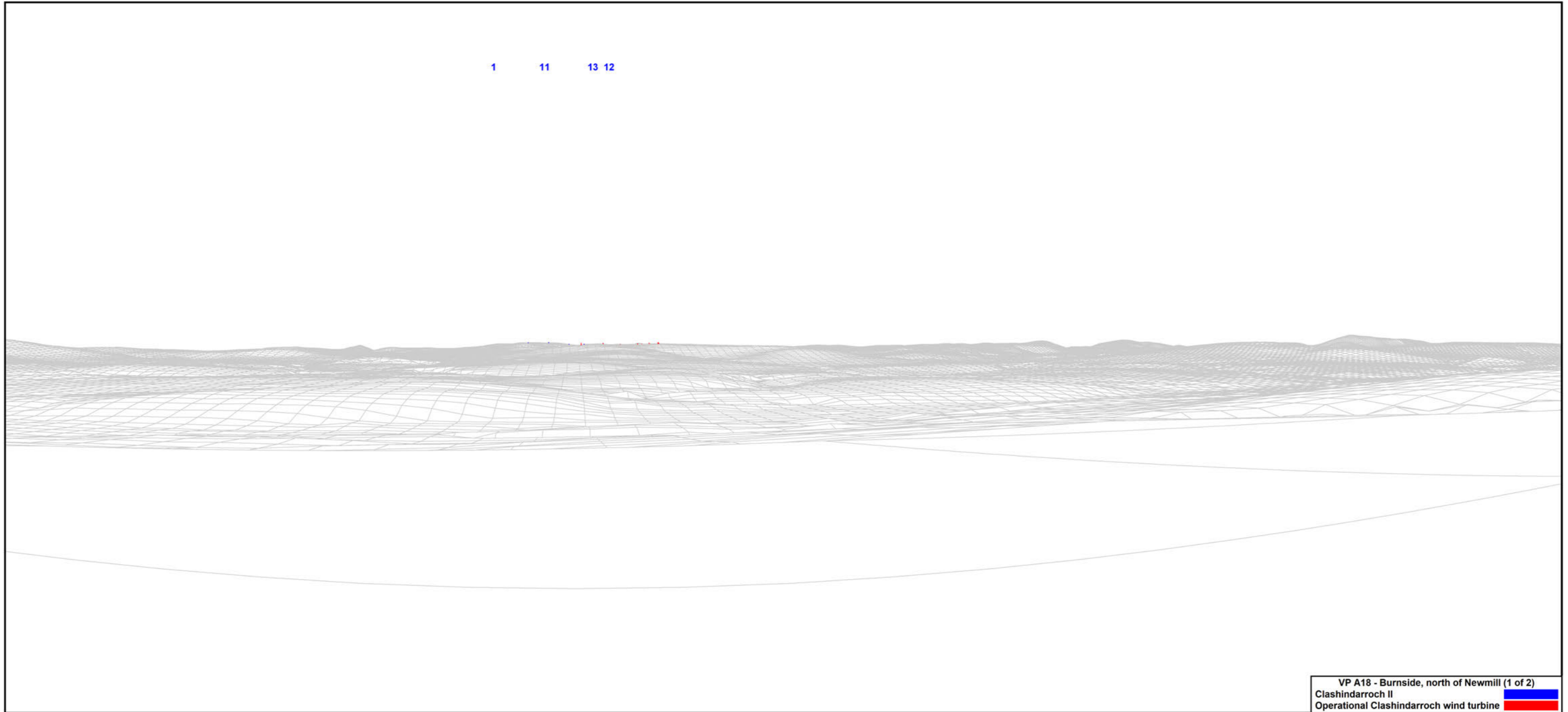
Wireframe calculation does not take into account any surface features, such as buildings or vegetation.
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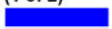

2 13 5 12 11 10 3 14 4 8 1 9 6



VP A17 - Oxen Craig (1 of 2)
Clashindarroch II 
Operational Clashindarroch wind turbine 

1 11 13 12

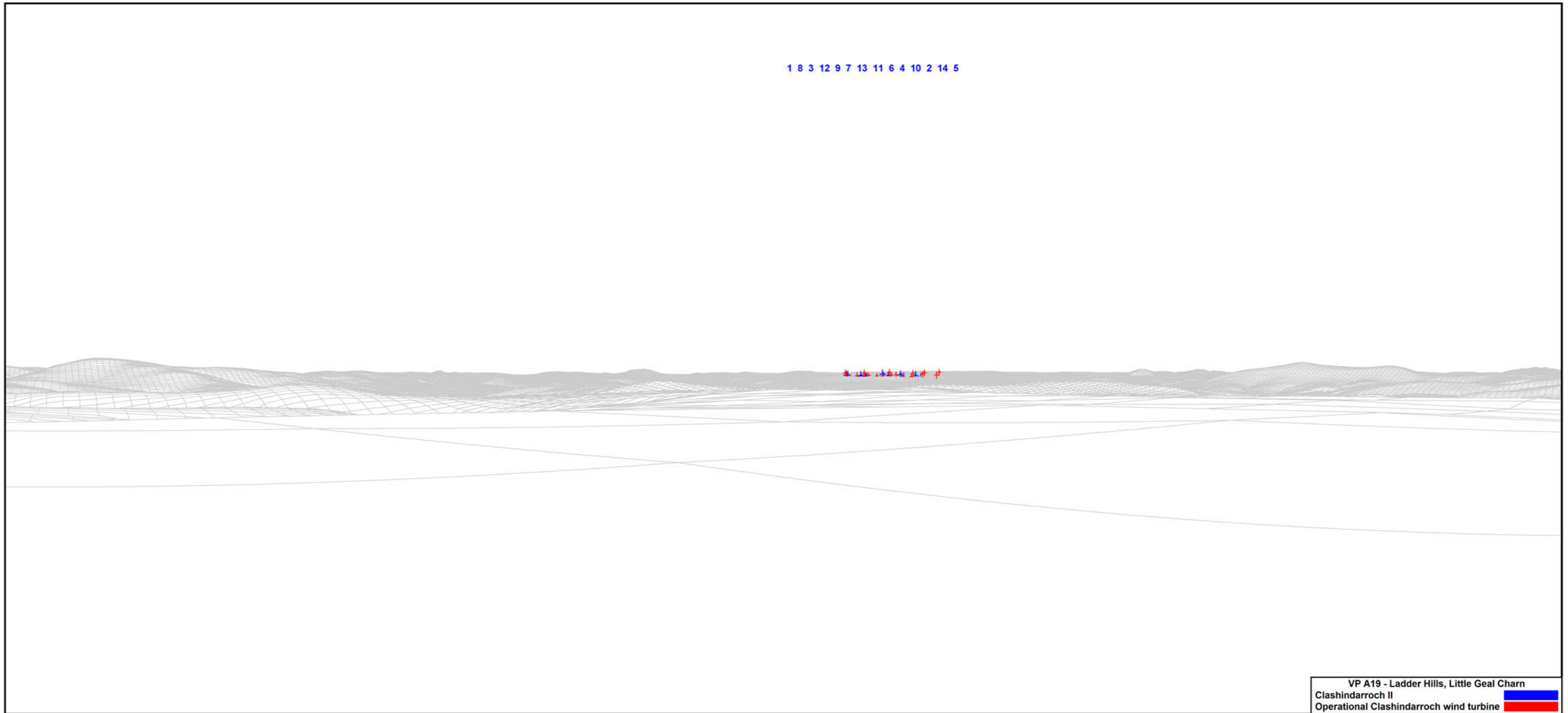


VP A18 - Burnside, north of Newmill (1 of 2)
Clashindarroch II 
Operational Clashindarroch wind turbine 

Wireframe with 90 degrees included angle. Recommended viewing distance at A3: 250 mm.
Projection: Cylindrical
Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
Ref: CLON008.GTH, VCLON009_Extract, LCLON046.WFL [Hub height: 81.9 m; Rotor diameter: 136 m],
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CLON-1AG-600-077-A

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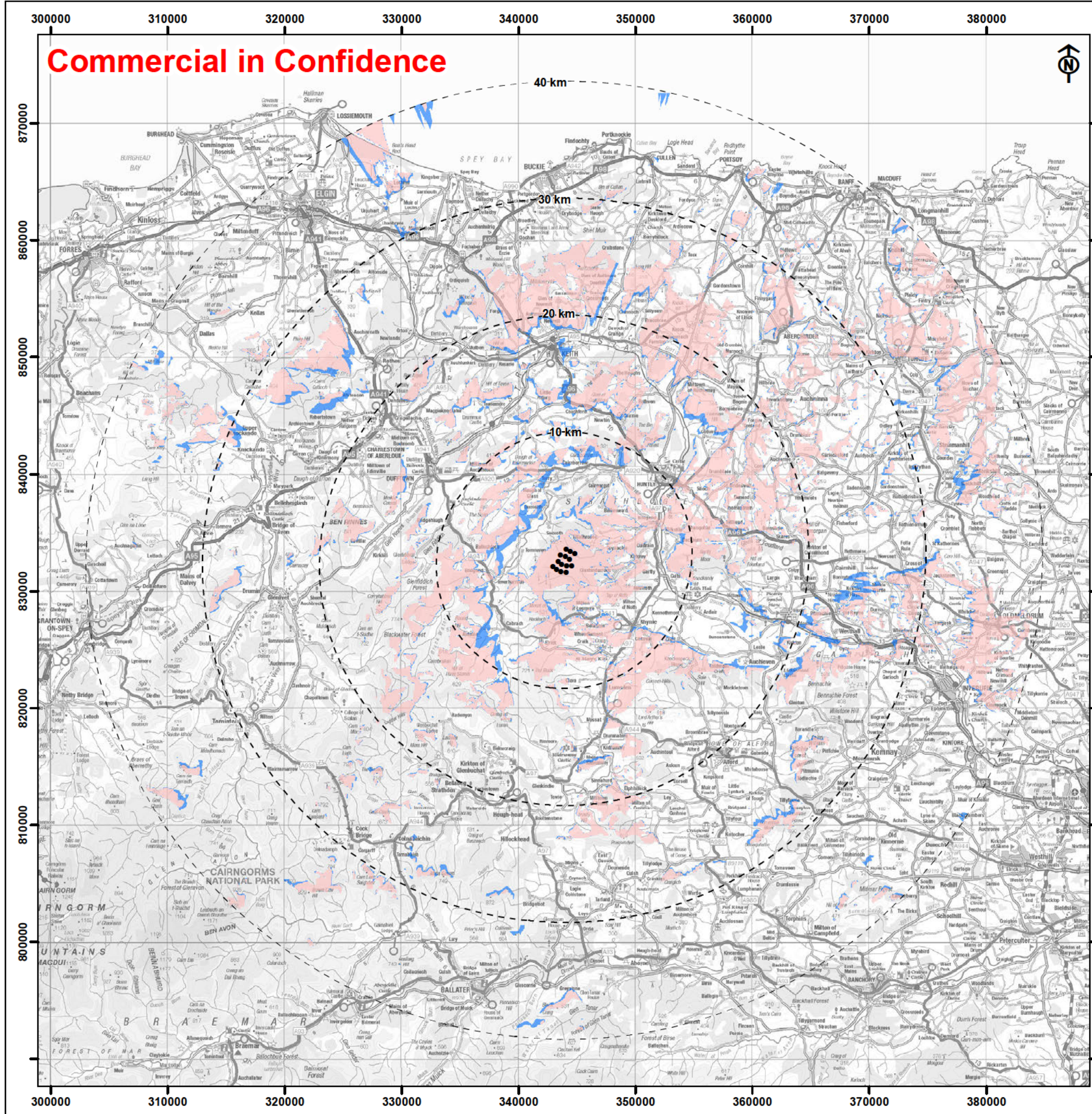




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Projection: Cylindrical
Earth's curvature and atmospheric refraction included (6367 km / 0.075). Adaptive grid turned off
Ref: CLON008.GTH, VCLON009_Extract, LCLON046.WFL [Hub height: 81.9 m; Rotor diameter: 136 m],
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CLON-1AG-600-079-A

Wireframe calculation does not take into account any surface features, such as buildings or vegetation.
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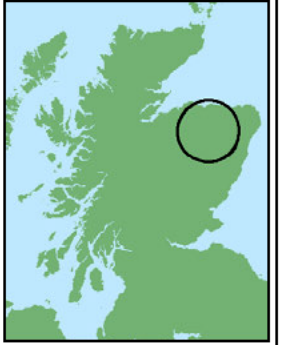
Commercial in Confidence



Legend

- Wind turbine
- Buffer of wind turbines (10 km, 20 km, 30 km 40 km)
- Zone of Theoretical Visibility (ZTV) 1,2,3,4,5**
- Visibility from wind turbines at 149.9 m tip
- Additional visibility introduced at 180 m tip

- Notes**
1. ZTV calculated using Earth's curvature (radius of 6367 km) and an atmospheric refraction co-efficient of 0.075.
 2. Terrain is derived from Ordnance Survey 50 m gridded height data.
 3. ZTV calculation does not take into account any surface features, such as buildings or vegetation.
 4. Calculation resolution is 50 m (run files ZCLON025, ZCLON026).
 5. A wind turbine tip height of 149.9 m and 180 m and viewer height of 2 m have been assumed.
 6. This drawing/map has been produced to the latest known information at the time of issue. Please consult with the Vattenfall GIS team to ensure the content is still current before using the information contained on this map.



VATTENFALL Vattenfall Wind Power Ltd
 20 Andrew House, Haugh Lane, Heatham, UK NE 6 3QQ
 Tel: (0) 13 61300

A	24/06/20	LHOP	XXXX	First Issue
Rev	Date	Drawn By	Checked By	Comment
Clashindarroch II Wind Farm Submitted Wind Turbine Layout Visibility Comparison between Tip Heights ZTV to 40 km for Tip Heights 149.9 and 180 m				
Datum	OSGB 1936			Confidentiality Class
Projection	British National Grid			C2 Medium
Plot	A3			Drg No
Scale	1:350,000			CLON-1AG-600-080
				Rev
				A
				Layout
				LCLON046

Ref: CLON_OWTG_WTG_LCLON046_PT_v02_200225hop27700, CLON_OWTG_WTG_LCLON046_PT_v02_200225hop27700_Buff40km, CLON_OWTG_WTG_LCLON046_PT_v02_200225hop27700_Buff30km, CLON_OWTG_WTG_LCLON046_PT_v02_200225hop27700_Buff20km, CLON_OWTG_WTG_LCLON046_PT_v02_200225hop27700_Buff10km, CLON_EVLV_ZTV_ZCLON025LCLON046_149mTip_v01_200624hop_27700 [NOT gridcode = 0], CLON_EVLV_ZTV_ZCLON026LCLON046_180mTip_v01_200624hop_27700 [NOT gridcode = 0]