

## **Aviation Impact Assessment**

SSE Renewables Developments (UK) Ltd

**Achany Extension Wind Farm** 

September 2025

## **PLANNING SOLUTIONS FOR:**

Solar

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Railways

- Defence
- Buildings
- Wind
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- Radar
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Issue	Date	Detail of Changes
1 - 3	February 2020 - April 2021	Assessment for previous EIAR
4	May 2025	Assessment of Proposed Varied Development
5	September 2025	Minor revisions

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#### **EXECUTIVE SUMMARY**

#### **Report Purpose**

Pager Power has been commissioned to investigate the potential impact of a proposed variation to a consented wind development located west of Lairg, Sutherland, to determine to determine the impact of the Proposed Varied Development upon the surrounding aviation and radar infrastructure.

The aim of this technical report is to identify and assess the potential risks and impacts of the Proposed Varied Development associated with civil and military aviation assets with reference to radar interference and operational safety.

The Proposed Varied Development comprises 18 wind turbines with a maximum tip height of 200m agl and a maximum rotor diameter of 136m.

#### **Conclusions**

No impacts to civil airport radar or aircraft flying under Instrument Flight Rules are predicted.

The Proposed Varied Development will present a significant physical obstruction to civil aircraft, military aircraft, and helicopters flying in the area. Aviation lighting will therefore be implemented and the Proposed Varied Development will be marked on aeronautical charts.

A detailed Aviation Lighting Scheme, with justification of further lighting reduction based on the most up-to-date applicable lighting guidance, will be produced and presented to the CAA post

No significant cumulative impacts associated with the existing Rosehall and Achany Wind Farms are predicted.



## **LIST OF CONTENTS**

Admin	istrati	on Page	2
Execut	tive S	ummary	3
	Repo	rt Purpose	3
	Conc	lusions	3
List of	Cont	ents	4
List of	Figur	es	5
List of	Table	S	5
About	Page	Power	6
1	Intro	duction	7
	1.1	Overview	7
2	Prop	osed Varied Development Details	8
	2.1	Proposed Varied Development Layout	8
	2.2	Wind Turbine Details	8
3	Iden	tification of Aviation and Radar Infrastructure	9
	3.1	Airspace	9
	3.2	Study Areas	9
	3.3	Identified Infrastructure	10
4	Appr	oach to the Assessment	13
	4.1	Assessment Approach	13
	4.2	Radar Analysis Methodology	14
5	Impact Assessment Discussion		15
	5.1	Inverness Airport Radar	15
	5.2	Aircraft Flying IFR	15
	5.3	Aircraft Flying using VFR	16
6	Avia	tion Lighting	18
	6.1	Requirement for Lighting	18
	6.2	Minimising Visible Aviation Lighting	18
	6.3	Aviation Lighting Scheme	19



7	Cum	Cumulative Assessment		
	7.1	Overview	20	
	7.2	Surrounding Projects	20	
	7.3	Cumulative Assessment	21	
8	Ove	rall Conclusions	22	
	8.1	Inverness Airport Radar	22	
	8.2	Aircraft Flying IFR	22	
	8.3	Aircraft Flying VFR	22	
	8.4	Cumulative Impacts	22	
Арре	endix A	- Wind Turbine Data	23	
	Wind	d Turbine Data	23	
Арре	endix B	- Line-of-Sight and Radar Detectability Charts	24	
	Ovei	rview	24	
	Inve	rness Airport PSR	25	
LIS	ΓOF	FIGURES		
Figui	re 1 Pro	oposed wind turbine layout and site boundary	8	
Figui	re 2 Lo	cation of Inverness Airport radar	11	
Figui	re 3 Pro	oposed Varied Development relative to military low flying areas	12	
Figui	re 4 Su	rrounding projects relative to the Proposed Varied Development	20	
LIST	ΓOF '	TABLES		
Table	e 1 Ass	essed wind turbine details	8	
Table	e 2 Idei	ntified radar infrastructure	10	
Table	<u> </u>	S and radar detectability – Inverness Airport	15	



#### **ABOUT PAGER POWER**

Pager Power is a dedicated consultancy company based in Suffolk, UK. The company has undertaken projects in 62 countries within Europe, Africa, America, Asia and Australasia.

The company comprises a team of experts to provide technical expertise and guidance on a range of planning issues for large and small developments.

Pager Power was established in 1997. Initially the company focus was on modelling the impact of wind turbines on radar systems. Over the years, the company has expanded into numerous fields including:

- Renewable energy projects.
- Building developments.
- Aviation and telecommunication systems.

Pager Power prides itself on providing comprehensive, understandable and accurate assessments of complex issues in line with national and international standards. This is underpinned by its custom software, longstanding relationships with stakeholders and active role in conferences and research efforts around the world.

Pager Power's assessments withstand legal scrutiny and the company can provide support for a project at any stage.



#### 1 INTRODUCTION

#### 1.1 Overview

Pager Power has been commissioned to investigate the potential impact of a proposed variation to a consented wind development located west of Lairg, Sutherland, to determine to determine the impact of the Proposed Varied Development upon the surrounding aviation and radar infrastructure.

Wind developments have the potential to affect aviation and radar operations in numerous ways. The most common impacts relate to turbines as physical obstructions both to aircraft and wireless signals used for radar and radio systems. In detail the report includes:

- Proposed Varied Development details;
- Identification of aviation and radar infrastructure, including:
  - Civil and military radar;
  - Civil and military aerodromes;
  - Military low flying areas;
  - Restricted/Danger areas;
  - Helicopter operations;
  - Meteorological radar.
- Approach to the assessment;
- Impact assessment for identified infrastructure;
- High-level commentary regarding further considerations, including:
  - o Crane usage;
  - Lighting requirements.
- Overview of radar mitigation options;
- Overall conclusions.



#### 2 PROPOSED VARIED DEVELOPMENT DETAILS

#### 2.1 Proposed Varied Development Layout

The proposed turbine layout and site boundary is shown in Figure 1 below.

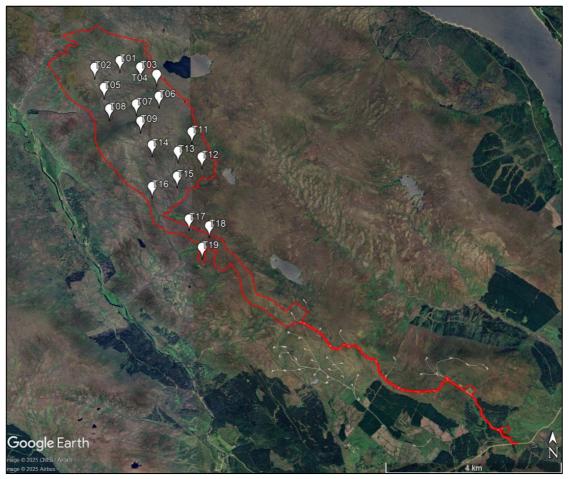


Figure 1 Proposed wind turbine layout and site boundary

#### 2.2 Wind Turbine Details

The maximum wind turbine dimensions are presented in Table 1 below. The coordinate and altitude data are presented in Appendix A.

Maximum Rotor Diameter (m)	Nominal Hub Height (m agl)	Maximum Tip Height (m agl)
138	130 - 132	200

Table 1 Assessed wind turbine details



#### IDENTIFICATION OF AVIATION AND RADAR INFRASTRUCTURE

#### 3.1 Airspace

The Proposed Varied Development is located in the Scottish Flight Information Region (FIR), which covers all of Scotland and the north-east of England. FIR are managed by a controlling authority that ensures air traffic services are provided to the aircraft flying within it. The Civil Aviation Authority (CAA) is the controlling authority of the Scottish FIR and NATS provides Air Traffic Services (ATS) in the region for en-route aircraft.

The Proposed Varied Development is within Low Flying Area (LFA) 14T, one of the UK's Tactical Training Area (TTA) where significant military low flying activities are undertaken.

From ground level to Flight Level (FL) 195 (approximately 19,500ft) is Class G uncontrolled airspace, where aircraft may fly when and where they like, subject to a set of simple rules. Although there is no legal requirement to do so, many pilots notify ATC of their presence and intentions and pilots take full responsibility for their own safety. ATC can provide pilots in Class G with Flight Information Services (FIS) to support their safe flying. An Alerting Service is also provided if necessary to notify appropriate organisations regarding aircraft in need of assistance (e.g., search and rescue).

The airspace above the entire site from FL195 to FL245 is Temporary Reserved Areas understood to be used by the military where activities like military air combat, training exercises, and supersonic flight take place.

#### 3.2 Study Areas

A search of aviation and radar infrastructure has been undertaken to identify potential risks. The Study Areas for the assessment of aviation and radar have been defined on the basis of those defined in Chapter 4 of the Civil Aviation Publication (CAP) 764 document. The recommended distances for different infrastructure types are defined in CAP 764 as follows:

- Airfield with a surveillance radar 30 kilometres (km):
- Non radar licensed aerodrome with a runway of more than 1,100 m 17 km;
- Non radar licensed aerodrome with a runway of less than 1,100 m 5 km;
- Licensed aerodromes where the wind turbines would lie within airspace coincidental with any published Instrument Flight Procedures (IFP);
- Unlicensed aerodromes with runways of more than 800 m 4 km;
- Unlicensed aerodromes with runways of less than 800 m 3 km;
- Gliding sites 10 km; and
- Other aviation activity such as parachute sites and microlight sites within 3 km in such instances developers are referred to appropriate organisations.

CAP 764 goes on to state that these distances are for guidance purposes only and do not represent ranges beyond which all wind developments will be approved, or within which they



will always be objected to. These ranges are intended as a prompt for further discussion between developers and aviation stakeholders. On this basis, the following identification criteria was used based on Pager Power's experience:

- UK AIP listed Civil Aerodromes and Heliports within 30 km of the Proposed Varied Development;
- Unlicensed airfields within 10 km of the Proposed Varied Development;
- Civil airport ATC radars within 111.12 km (60 NM) of the Proposed Varied Development or that are within line of sight to the wind turbines;
- NATS en-route radar sites within 200 km of the Proposed Varied Development or that are within line of sight to the wind turbines;
- En-Route radio navigation beacons within 10 km of the Proposed Varied Development;
- Use of the on-line NATS self-assessment maps;
- Ministry of Defence (MOD) ASACS radar sites within radio line of sight and within 100 km of the Proposed Varied Development;
- Military Aerodromes within 60 km of the Proposed Varied Development;
- Military ATC radar sites within 111.12 km of the Proposed Varied Development or that are within line of sight to the wind turbines;
- Military Precision Approach Radar (PAR) sites within 40 km of the Proposed Varied Development;
- Ministry of Defence Tactical Training Areas within 10 km of the Proposed Varied Development;
- Meteorological Radars within 20 km of the Proposed Varied Development;
- Other significant aviation issues which require consideration.

#### 3.3 Identified Infrastructure

#### 3.3.1 Civil and Military Radar

The identified civil and military radar infrastructure is presented in Table 2 below.

Radar	Distance from Proposed Varied Development (km)	Comment
Inverness Airport Primary Surveillance Radar (PSR)	62.0	Civil radar operated by Inverness Airport to provide ATC services for aircraft in the airport's airspace

Table 2 Identified radar infrastructure



The location of Inverness Airport relative to the Proposed Varied Development is shown in Figure 2 below.



Figure 2 Location of Inverness Airport radar

#### 3.3.2 Civil and Military Aerodromes

No civil or military aerodromes were identified in the 30km study area.

#### 3.3.3 Military Low Flying

Military low flying can take place throughout the UK. The MOD has published a map indicating areas within the UK where military low flying activities are the most likely to cause an objection. The map is colour coded as follows:

- Green Area with no military low flying concerns;
- Blue Low priority military low flying areas less likely to raise concerns;
- Amber Regular military low flying area where mitigation may be necessary to resolve concerns;
- Red High priority military low flying area likely to raise considerable and significant concerns.

The Proposed Varied Development is in the red area meaning that it is in a high priority military low flying zone. The location Proposed Varied Development relative to the military low flying areas is shown in Figure 3 on the following page.





Figure 3 Proposed Varied Development relative to military low flying areas

#### 3.3.4 Restricted/Danger Areas

Due to the location of the site within the TTA, it is also located within Restricted Area EGR610A from the ground to 5,000ft. No General Aviation (GA) flights are permitted within Restricted Areas when active. EGR610A is a Notice to Air Missions (NOTAM) activated Restricted Area which is activated only when the military is conducting low flying activities.

EGR610A has the same footprint as the high priority military low flying area and is therefore shown by the red area in Figure 3 above.

#### 3.3.5 Helicopter Operations

Helicopter routes are not formally established over the Proposed Varied Development.

Search and Rescue (SAR) helicopters could operate in and around the Proposed Varied Development; however, there are no formally safeguarded helicopter main routes.

#### 3.3.6 Meteorological Radar

The closest meteorological radar to the Proposed Varied Development is the Holehead weather radar station, which is located approximately 94 km to the north-west of the Proposed Varied Development.

The Proposed Varied Development is significantly outside the study area and the range in which concerns are typically raised by the Met Office.



#### 4 APPROACH TO THE ASSESSMENT

#### 4.1 Assessment Approach

When evaluating new infrastructure in the vicinity of radar installations it is necessary to consider:

- Whether there is potential for a technical impact. A technical impact means that the
  behaviour of the physical signals to and from the radar is physically affected in some
  way by the development. If there is no technical impact, the radar is unaffected by the
  development. Determining technical impact is almost entirely a matter of accurately
  modelling signal propagation and interaction based on technical data for the radar and
  the turbines;
- Where there is a potential technical impact, it is necessary to evaluate the associated operational impact it causes. This means the extent to which the effect on the physical signals is noticeable and/or important for the radar operator. Determining operational impact requires consideration of the technical impact's magnitude and the operational requirements of the radar operator.

Wind turbines that are detectable to a surveillance radar can cause a technical impact because:

- They can appear as targets on the radar screen known as clutter;
- They can cause some shadowing due to physical blocking of the signals;
- They can cause reflections of inbound and outbound radar signals;
- Reflected signals can cause desensitisation of the radar receiver, meaning that wanted targets are more difficult to detect or no longer detectable.

The operational significance of technical impacts is influenced by the radar operator's requirements – which in this case are likely to be confidential to a certain degree. However, it is generally the case that:

- The technical impacts of radar clutter are predominantly of operational concern because:
  - They have the potential to cause a distraction to a radar operator observing the screen;
  - o The clutter could be mistaken for return from a genuine radar target;
  - The clutter could 'hide' a genuine radar target;
  - o An operator may have to direct traffic of some kind around an area of clutter.
- The technical impacts of shadowing are predominantly of operational concern because genuine targets will be harder to detect behind the obstruction – particularly if they are small/weak;
- The technical impacts of reflected inbound and outbound radar signals are that targets may be displayed on the wrong bearing or at the wrong range.



#### 4.2 Radar Analysis Methodology

Technical analysis has been undertaken based on:

- Radar line of sight which determines how much of a turbine is illuminated by the radar signal considering:
  - The radar position;
  - The turbine position;
  - The intervening terrain profile;
  - Radar refraction;
  - Earth curvature.
- Assessment of the predicted impact in the context of the existing environment has been undertaken, where appropriate. The modelling described above accounts for the intervening terrain. It does not account for additional obstructions on the ground along the radar line of sight e.g. buildings or vegetation;
- Radar detectability analysis which determines the likelihood of a turbine being displayed on a radar screen based on additional parameters including:
  - Diffraction losses;
  - Free space path losses;
  - Radar frequency band;
  - Typical antenna characteristics.

The purpose of radar detectability analysis is to understand the likely impact of radar line of sight, where applicable. Radar detectability analysis has been undertaken to determine the likelihood of the turbine causing clutter on a radar screen. Whilst radar line of sight analysis quantifies how much of the turbine is illuminated by the radar beam, detectability analysis incorporates further parameters based on the radar type and intervening terrain in order to quantify not just the level of illumination but the likelihood of a noticeable technical impact.

The radar line-of-sight and radar detectability charts for the most visible turbines to each radar are presented in Appendix B.



#### 5 IMPACT ASSESSMENT DISCUSSION

#### 5.1 Inverness Airport Radar

The radar line-of-sight (LOS) and radar detectability analysis shows that all 18 turbines will be hidden by the Inverness Airport radar.

A summary of the visibility to Inverness Airport radar is presented in Table 3 below.

Turbine	Visibility	Turbine	Visibility
1	-697.2	10	-649.2
2	-686.9	11	-708.9
3	-738.4	12	-695.8
4	-716.4	13	-674.3
5	-749.9	14	-718.0
6	-648.4	15	-722.5
7	-678.0	16	-696.7
8	-719.8	17	-665.8
9	-649.4	18	-679.3

Table 3 LOS and radar detectability - Inverness Airport

Overall, no technical impacts to the Inverness Airport radar are predicted.

#### 5.2 Aircraft Flying IFR

Aircraft flying using Instrument Flight Rules (IFR) are subject to a set out rules that guarantees appropriate vertical and horizontal clearance from terrain, obstacles and other aircraft. If an obstacle breaches the guaranteed clearances then the aircraft flying IFR will not have sufficient protection.

Aircraft flying Instrument Flight Rules (IFR) have been assessed at a high-level by considering the Inverness Airport Surveillance Minimum Altitude Chart (SMAC), Area Minimum Altitude (AMA), and published Instrument Flight Procedures (IFP).



#### 5.2.1 Surveillance Minimum Altitude Chart

Surveillance Minimum Altitude Charts (SMAC) are published to show the lowest altitude a pilot will be instructed to fly whilst receiving an Air Traffic Control (ATC) service. The Proposed Varied Development is significantly outside the 15 nautical mile standard lateral limits of a SMAC and therefore pilots in this airspace will not be receiving instruction from radar derived ATC services. No impacts upon the SMAC are therefore predicted.

#### 5.2.2 Area Minimum Altitude

The AMA shown for the quadrangle in which the development is located is 4,700ft. The Proposed Varied Development has a maximum altitude of 1,900ft, which is 2,800ft below the AMA. The AMA is therefore not impacted by the Proposed Varied Development.

#### 5.2.3 High-level IFP Assessment

As a general rule, IFPs are designed so that there are vertical and horizontal safety margins between the specified trajectory and surrounding terrain and obstacles. These margins vary depending on the phase of flight and whether UK, European or International rules are being considered. Nevertheless, the vertical margins are typically  $300 \, \mathrm{m}^1$  (except in particularly mountainous regions which this area of Scotland is not). This means that if the vertical clearance between an IFP route and the top of the Proposed Varied Development exceeds 300m then it will not have a significant safety impact on aircraft flying the route.

The maximum altitude of the Proposed Varied Development is 1,900ft. This means that the Proposed Varied Development will be vertically clear of any aircraft subject to an IFP route or limit which is more than 2,900ft. Based on the significant distance from any licensed aerodromes, an aircraft flying an IFP is not predicted to be lower than 2,900ft.

A detailed IFP assessment is not recommended considering the results of this high-level assessment.

#### 5.3 Aircraft Flying using VFR

This section considers the Proposed Varied Development as a physical obstruction for aircraft flying using Visual Flight Rules (VFR) whereby pilots to fly by using visual references to navigate.

#### 5.3.1 Maximum Elevation Figure

The Maximum Elevation Figure (MEF) is the altitude of the highest terrain or structure in a particular quadrangle of a standard CAA aeronautical chart.

The MEF shown for the quadrangle in which the development is located is 3,600ft. The Proposed Varied Development has a maximum altitude of 1,900ft which is less than the published figure.

The published MEF will therefore not be affected by the Proposed Varied Development.

<sup>&</sup>lt;sup>1</sup> 984.252 ft has been applied.



#### 5.3.2 Civil Aircraft

The wind turbines will present significant obstructions into the environment for civil aircraft due to their height, particularly when flying at night.

An appropriate aviation lighting scheme will be implemented in accordance with Civil Aviation Publication (CAP) 764 and Air Navigation Order (ANO) 2016. An indicative lighting scheme is presented in Section 6, though the scheme will require agreement from the CAA and MOD.

The Proposed Varied Development will also be marked on the relevant aeronautical charts.

Following the implementation of the appropriate aviation lighting and the wind turbines being marked on aeronautical charts, the potential impact upon civil aircraft flying using VFR will be sufficiently reduced.

#### 5.3.3 Military Low Flying

The wind turbines will present significant obstructions into the environment for military aircraft conducting low flying operations in the TTA, particularly when flying at night.

An appropriate aviation lighting scheme will be implemented in accordance with Civil Aviation Publication (CAP) 764 and Air Navigation Order (ANO) 2016. An indicative lighting scheme is presented in Section 6, though the scheme will require agreement from the CAA and MOD.

The MOD will also require that sufficient information is submitted to ensure accurate marking of the wind turbines on aeronautical charts. This includes the finalised wind turbine locations and heights above sea level.

Following the implementation of the appropriate aviation lighting and the wind turbines being marked on aeronautical charts, the potential impact upon military low flying will be sufficiently reduced.

#### 5.3.4 Helicopter Operations

The wind turbines will present significant obstructions into the environment for helicopter operations, particularly when flying at night.

Although helicopter routes are not formally established over the Proposed Varied Development, helicopters could fly in its vicinity. Helicopter pilots are also trained to identify and interpret obstruction lighting and therefore the lighting for civil aircraft is also predicted to be appropriate for helicopter operations.

Following the implementation of the appropriate aviation lighting and the wind turbines being marked on aeronautical charts, the potential impact upon helicopter operations flying using VFR will be sufficiently reduced.



#### **6 AVIATION LIGHTING**

#### 6.1 Requirement for Lighting

Due to the location of the Proposed Varied Development in the TTA, the MOD has requested that the perimeter turbines be fitted with 25 candela omni-directional red lighting or infrared COMBI lighting with an optimised flash pattern of 60 flashes per minute of 200ms to 500ms duration at the highest practicable point. The proposed turbines also have a maximum tip height which is higher than 150m agl, and therefore there is a legal requirement for visible lighting in accordance with the Air Navigation Order (ANO) 222² and draft CAP 764.

The developer is however keen to pursue an aviation lighting scheme that minimises visible lighting due to the impact upon public amenity. It is also understood that the majority of military night low flying is now conducted with the aid of aircrew Night Vision Goggles (NVGs), to which infrared lighting would be suitable.

#### 6.2 Minimising Visible Aviation Lighting

Methods of reducing aviation lighting effects in relation to other topics (e.g., landscape and visual) will be applied where possible in accordance with draft CAP 764 and NatureScot guidance<sup>3</sup>, and with permission from the CAA. The methods of minimising visible aviation lighting are as follows:

- Automatic dimming: Sensor controlled lighting that allows for a reduction in brightness, from 2000 cd to 200 cd, in conditions of good meteorological visibility.
- Vertical directional intensity (narrow vertical beam spread sometimes called 'narrow vertical beam spread' or 'angle intensity mitigation'): Specification of aviation warning light design that allows for reduction in brightness when viewed from certain elevations above and below the horizontal plane of the nacelle.
- Reduced lighting scheme: This mitigation comprises project-specific agreement from the CAA that only cardinal or specific turbines, rather than all, can be fitted with visible lighting. Such reduced lighting schemes can also include the potential removal of midtower low-intensity (32 cd) visible lights.

Aircraft Detection Lighting Systems (ADLS) is a developing mitigation solution, which involves aviation lighting only turning on when aircraft are detected in the vicinity of the Proposed Varied Development, either by radar or transponder. This solution is yet to gain a legal basis in the UK and therefore the future lighting scheme is likely to be focused on the mitigation options outlined above.

<sup>&</sup>lt;sup>2</sup> Unless otherwise stated by the CAA.

<sup>&</sup>lt;sup>3</sup> Guidance on Aviation Lighting Impact Assessment - November 2024.



#### 6.3 Aviation Lighting Scheme

Developers may apply to the CAA for specific obstacle lighting designs/layouts. Any lighting scheme that reduces the overall lighting provision would require additional justification for such a layout, consideration of the airspace and types of operation in the airspace, and addition of additional mitigation measures.

A detailed Aviation Lighting Scheme, with justification of further lighting reduction based on the most up-to-date applicable lighting guidance, will be produced and presented to the CAA and MOD post consent.



#### 7 CUMULATIVE ASSESSMENT

#### 7.1 Overview

The cumulative impacts considering the identified surrounding projects are assessed in the following subsections. The impacts upon the identified civil radar and the Proposed Varied Development as a physical obstruction for aircraft flying VFR have been considered.

The impacts upon aircraft associated with IFR have not been considered further because all the aircraft flying IFR will already have the appropriate clearance from all existing projects.

#### 7.2 Surrounding Projects

The Proposed Varied Development is located directly north-west of the existing Rosehall and Achany Wind Farms, which are shown in Figure 4 below as the red and blue circles respectively.

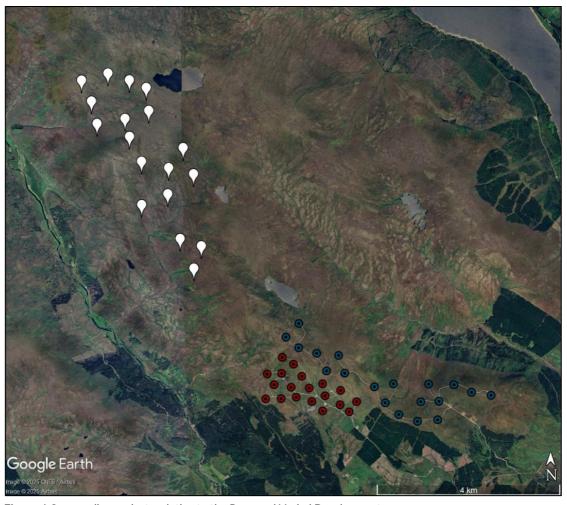


Figure 4 Surrounding projects relative to the Proposed Varied Development



#### 7.3 Cumulative Assessment

#### 7.3.1 Inverness Airport Radar

Cumulative impacts relating to the existing wind farms are not possible as the Proposed Varied Development in isolation is not expected to be detectable by the radar.

#### 7.3.2 Aircraft Flying VFR

The wind turbines would introduce obstructions into the surrounding environment and reduce the airspace available for surrounding aviation activity. Multiple onshore wind farms in a given sector would introduce further obstructions and further reduce the available airspace for surrounding aviation activity.

On the basis that the Proposed Varied Development and the two surrounding wind farms comply with appropriate lighting requirements and are marked on the relevant aeronautical charts, all pilots will be able to discern the wind turbines and evade them accordingly.

No significant cumulative effects are therefore predicted with respect to civil aircraft, military aircraft, or helicopter operations.



#### 8 OVERALL CONCLUSIONS

#### 8.1 Inverness Airport Radar

The analysis has shown that all proposed turbines will be significantly hidden from the Inverness Airport radar and will therefore will not be detectable.

#### 8.2 Aircraft Flying IFR

No SMACs or the AMA will be affected by the Proposed Varied Development.

The maximum altitude of the Proposed Varied Development is 1,900ft. This means that the Proposed Varied Development will be vertically clear of any aircraft subject to an IFP route or limit which is more than 2,900ft. Based on the significant distance from any licensed aerodromes, an aircraft flying an IFP associated with the airport is not predicted to be lower than 2,900ft.

A detailed IFP assessment is not recommended considering the results of this high-level assessment.

#### 8.3 Aircraft Flying VFR

The Proposed Varied Development will present a significant physical obstruction to civil aircraft, military aircraft, and helicopters flying in the area. Aviation lighting will therefore be implemented and the Proposed Varied Development will be marked on aeronautical charts.

A detailed Aviation Lighting Scheme, with justification of further lighting reduction based on the most up-to-date applicable lighting guidance, will be produced and presented to the CAA and MOD post consent.

The published MEF will therefore not be affected by the Proposed Varied Development.

#### 8.4 Cumulative Impacts

No significant cumulative impacts associated with the existing Rosehall and Achany Wind Farms are predicted.



## **APPENDIX A - WIND TURBINE DATA**

#### **Wind Turbine Data**

The wind turbine locations and assessed altitudes are presented in the table below.

Ref	Easting	Northing	Current Wind Turbine Altitude (m amsl)
T01	245163.952	911082.989	528.5
T02	244595.048	910949.995	537.3
T03	245617.670	910921.998	519.2
T04	245979.918	910739.931	534.5
T05	244768.059	910506.254	486.3
T06	246023.000	910241.000	562.3
T07	245495.008	910094.972	528.7
T08	244871.843	910017.815	487.5
T09	245597.429	909695.303	578.1
T11	246722.000	909421.000	521.5
T12	246915.000	908855.000	492.9
T13	246390.000	909004.000	513.7
T14	245810.499	909163.287	506.7
T15	246333.995	908448.012	462.3
T16	245756.009	908236.996	444.8
T17	246564.000	907472.000	455.2
T18	247025.000	907297.000	489.2
T19	246838.006	906821.004	465.2

Assessed wind turbine data



# APPENDIX B - LINE-OF-SIGHT AND RADAR DETECTABILITY CHARTS

#### **Overview**

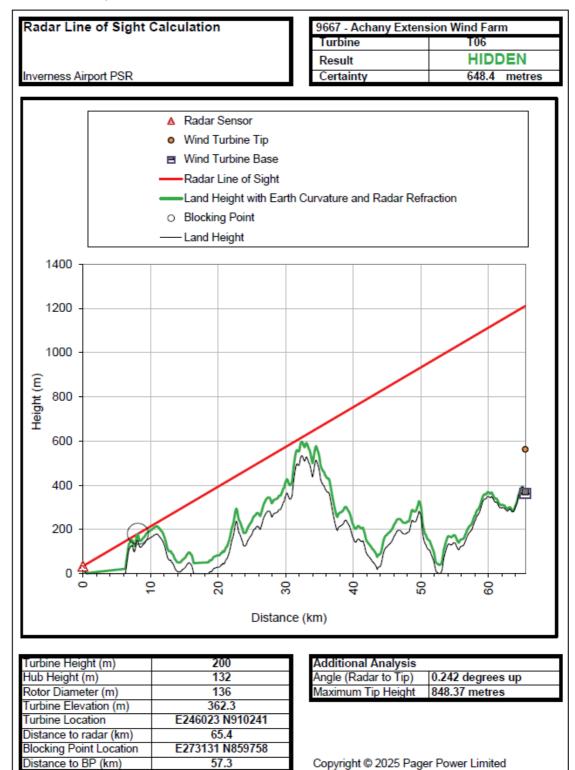
The radar line-of-sight charts and radar detectability charts for the most visible turbines to each radar are presented on the following pages.

The box labelled 'certainty' in the top right corner of the radar line-of-sight charts provides the distance (in metres) by which the wind turbine is or is not within line of sight to the assessed radar.

The bands on the radar detectability charts show the heights at which the likelihood of detection would decrease to 'likely', 'possible', 'unlikely' and 'highly unlikely'.

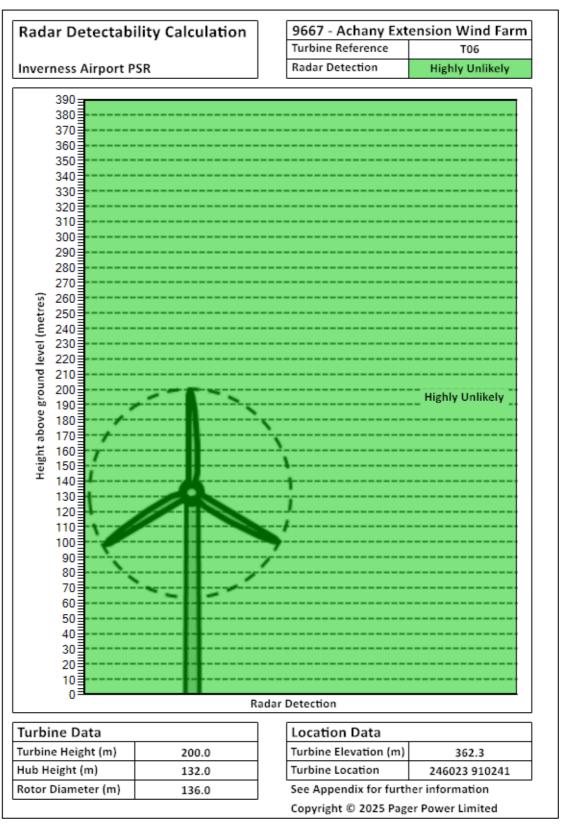


#### **Inverness Airport PSR**



Inverness Airport radar LOS - T06





Inverness Airport radar detectability - T06



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