

## **Aeronautical Sites at Risk from Wind Energy Developments**

## **Quick Check Analysis**

| Location name:      | Backies Farm 1        |                |        |
|---------------------|-----------------------|----------------|--------|
| OSGB Easting:       | 349785                | OSGB Northing: | 858675 |
| LandRanger® Grid    | NJ4978558675          |                |        |
| Remarks:            | First of two turbines |                |        |
| Terrain Model Used: | SRTM3                 |                |        |
|                     |                       |                |        |

Date: 27 November 2012

| Are there any Officially Safeguarded airfields within 30km? |                            | No |     |
|-------------------------------------------------------------|----------------------------|----|-----|
| Airfield Name:                                              | N/A Airfield Distance: N/A |    | N/A |
| Remarks:                                                    | N/A                        |    |     |

| Are there any other airfields that may need to be considered? |     | No                 |     |
|---------------------------------------------------------------|-----|--------------------|-----|
| Airfield Name:                                                | N/A | Airfield Distance: | N/A |
| Remarks:                                                      | N/A |                    |     |

| Are there any radar installations that may need to be considered? |                                                                 | Yes                  |         |
|-------------------------------------------------------------------|-----------------------------------------------------------------|----------------------|---------|
| Radar site name:                                                  | RAF Lossiemouth PSR                                             | Radar site distance: | 30.79km |
| Maximum blade tip height likely to be tolerable:                  |                                                                 | Not an issue.        |         |
| Remarks:                                                          | MoD. There is significant terrain screening between the sites.  |                      |         |
|                                                                   |                                                                 |                      |         |
| Radar site name:                                                  | Allan's Hill PSR                                                | Radar site distance: | 40.54km |
| Maximum blade tip height likely to be tolerable:                  |                                                                 | Not an issue         |         |
| Remarks:                                                          | NERL. There is significant terrain screening between the sites. |                      |         |
|                                                                   |                                                                 |                      |         |
| Radar site name:                                                  | Perwinnes PSR                                                   | Radar site distance: | 61.94km |
| Maximum blade tip height likely to be tolerable:                  |                                                                 | Not an issue         |         |
| Remarks:                                                          | NERL. There is significant terrain screening between the sites. |                      |         |

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| Radar site name:                                 | RAF Buchan ADR                                                 | Radar site distance: | 63.98km |
|--------------------------------------------------|----------------------------------------------------------------|----------------------|---------|
| Maximum blade tip height likely to be tolerable: |                                                                | Not an issue.        |         |
| Remarks:                                         | MoD. There is significant terrain screening between the sites. |                      |         |

| Are there any aeronautical navigational aids that need to be considered? |     | No               |     |
|--------------------------------------------------------------------------|-----|------------------|-----|
| Navaid name:                                                             | N/A | Navaid distance: | N/A |
| Remarks:                                                                 | N/A |                  |     |

| Are there any aeronautical communications sites that need to be considered? |     | No             |     |
|-----------------------------------------------------------------------------|-----|----------------|-----|
| Site Name:                                                                  | N/A | Site distance: | N/A |
| Remarks:                                                                    | N/A |                |     |

| Office facilities against this proposed location. |  | There do not appear to be any limitations associated with aeronautical or Met Office facilities against this proposed location. |
|---------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------|
|---------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------|

## Abbreviations used

ADR Air Defence Radar

AGL Above Ground Level

km kilometres

m metres

MoD Ministry of Defence

N/A Not Applicable

NERL NATS En-Route Ltd

OSGB Ordnance Survey of Great Britain

PSR Primary Surveillance Radar

SRTM3 Shuttle Radar Topography Mission – 3 arc-second resolution

## **Please Note:**

These Quick Check assessments <u>should not</u> be considered as suitable for submission to planning authorities as evidence of a site having been fully, technically, evaluated against the risk of detection by radar, or of having limited effect on other aviation assets such as navigational aids or communications sites.

The purpose of these assessments is to assist with the selection of sites and equipment such that there is a reduced risk of causing clutter on radar or harmful interference to other aviation assets. Where a turbine tip height is selected that is close to that suggested in this assessment, it is strongly recommended that a full technical assessment is carried out to provide tabulated results using an ITU recommended propagation model.