

## Appendix 10.1

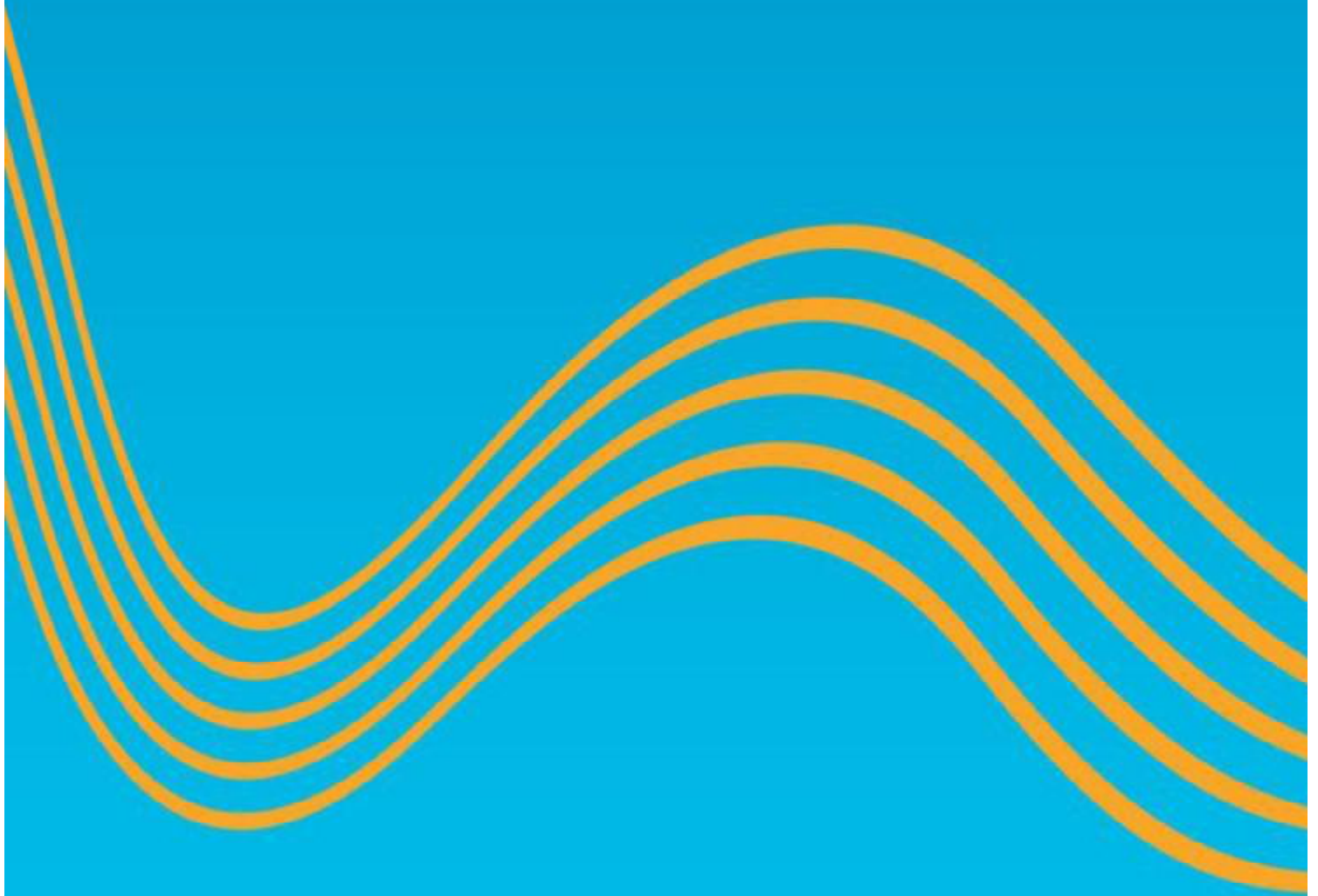


# **Technical and Operational Assessment (TOPA)**

For Swan Valley  
Windfarm Development

Issue 1

**NATS reference: W(F) 18635**



**Publication history**

<b>Issue</b>	<b>Month/Year</b>	<b>Changes in this issue</b>
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## 1. Background

### 1.1. En-route Consultation

NATS is responsible for the safe and expeditious movement in the en-route phase of flight for aircraft operating in controlled airspace in the UK. To undertake this responsibility it has a comprehensive infrastructure of radars, communication systems and navigational aids throughout the UK, all of which could be compromised by the establishment of a wind farm.

In this respect NATS is responsible for safeguarding this infrastructure to ensure its integrity to provide the required services to Air Traffic Control (ATC).

In order to discharge this responsibility NATS is a statutory consultee for all wind farm applications, and assesses the potential impact of every proposed development in the UK.

The En-route radar technical assessment section of this document defines the assessments carried out against the development proposed in section 2.

## 2. Application details

Airvolution Energy Ltd submitted a request for a NATS technical and operational assessment (TOPA) for the development at Swan Valley, land near Manor Farm, Bugbrooke as detailed in the table below.

Turbine	Latitude	Longitude	Easting	Northing	Hub (m)	Tip (m)
1	52.2181	-0.9884	469206	258243	80.5	126.5
2	52.2161	-0.9856	469399	258030	80.5	126.5
3	52.2191	-0.9820	469640	258361	80.5	126.5
4	52.2171	-0.9796	469813	258150	80.5	126.5

**Table 1 – turbine coordinates and height**

## 3. Assessments Required

The proposed development falls within the assessment area of the following systems:

NERL Radar Sites	Latitude	Longitude	Range(nm)	Range(km)	Azimuth(deg)	Type
Burrington Radar (cmb)	50.9343	-3.9854	136.1	252.1	54.4	CMB
Claxby Radar	53.4501	-0.3083	77.9	144.3	198.6	CMB
Clee Hill Radar	52.3983	-2.5975	60.2	111.6	99.7	CMB
Debden Radar	51.9902	0.2638	48.0	88.9	287.0	CMB
Great Dun Fell Radar	54.6841	-2.4509	157.2	291.1	159.9	CMB
Heathrow Radar (10cm)	51.4604	-0.4396	49.7	92.1	336.2	CMB
Bovingdon	51.7090	-0.5411	34.6	64.1	331.9	CMB
Pease Pottage Radar	51.0834	-0.2143	73.9	136.8	337.4	CMB
Stansted Radar	51.8869	0.2301	49.0	90.8	294.3	CMB
NERL Nav Aid Sites	Latitude	Longitude	Range(nm)	Range(km)	Azimuth(deg)	Type
Daventry	52.1801	-1.1138	5.2	9.6	64.8	DVOR/DME
NERL AGA Comms Sites	Latitude	Longitude	Range(nm)	Range(km)	Azimuth(deg)	Type
None						

**Table 2 – Impacted Infrastructure**

### **3.1. En-route radar technical assessment**

#### **3.1.1. Predicted impact on Radar**

No impact is anticipated on NATS's radar

### **3.2. En-route navigational aid assessment**

#### **3.2.1. Predicted impact on navigation aids.**

No impact is anticipated on NATS's navigation aids.

### **3.3. En-route radio communication assessment**

#### **3.3.1. Predicted impact on the radio communications infrastructure.**

No impact is anticipated on NATS's radio communications infrastructure.

## **4. Conclusions**

### **4.1. En-route consultation**

The proposed development has been examined by technical and operational safeguarding teams. A technical impact is anticipated, however this has been deemed to be acceptable.