Inch Cape Offshore Wind Farm

New Energy for Scotland

Offshore Environmental Statement: **VOLUME 2H** Appendix 20C: NATS En-route Plc (NERL) Technical and Operational





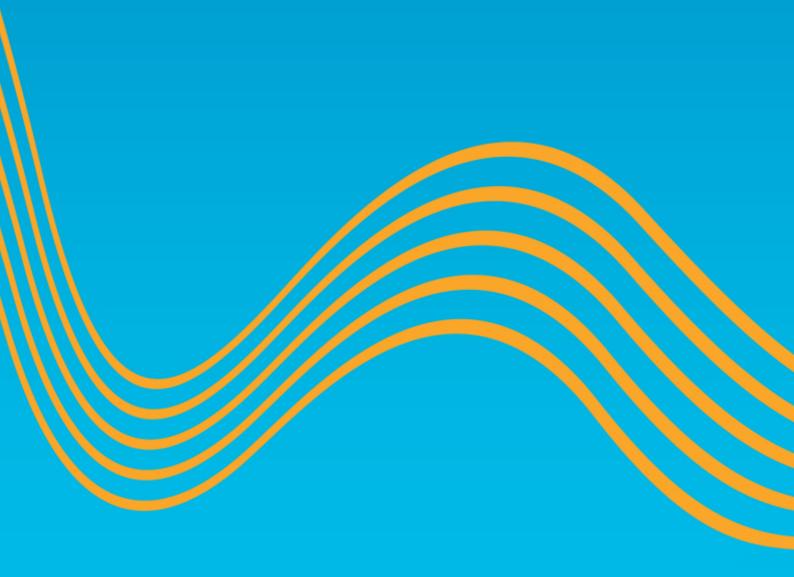


Technical and Operational Assessment (TOPA)

For Inch Cape Offshore Windfarm Development

Issue 2

NATS reference: W(F)8578



Publication history

| Issue | Month/Year | Changes in this issue |
|---------|---------------|-----------------------------------|
| Issue 1 | May 2009 | |
| Issue 2 | February 2013 | Pre Planning: En Route Assessment |

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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 <u>NATS</u> is a statutory consultee for all wind farm <u>applications</u>, and assesses the potential impact of every proposed development in the UK.

Section 0 of this document defines the assessments carried out against the development proposed in section 2, with the result detailed in section 4.

2. Application details

Repsol Nuevas Energias UK submitted a request for a NATS technical and operational assessment (TOPA) for the development at Inch Cape Offshore, located off the east of the Angus Coastline, up to 213 turbines are proposed within the boundary points as stated below:

| Boundary | Easting | Northing | Hub Height (m) | Tip Height (m) |
|----------|---------|----------|----------------|----------------|
| A | 389625 | 744746 | 129 | 215 |
| В | 390273 | 743559 | - | - |
| С | 389732 | 731676 | - | - |
| D | 397084 | 730114 | - | - |
| E | 397109 | 728437 | - | - |
| F | 392230 | 725563 | - | - |
| G | 385805 | 725656 | - | - |
| Н | 382315 | 731818 | - | - |
| I | 382387 | 736803 | - | - |
| J | 384715 | 742873 | = | _ |

<u>Table 1 – turbine coordinates and height</u>

3. Assessments Required

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

| NERL Radar Sites | Easting | Northing | Range (km) | Range (nm) | Bearing (True) | Туре |
|----------------------|---------|----------|------------|------------|----------------|------|
| Great Dun Fell Radar | 371030 | 532210 | 202.72 | 109.46 | 4.75 | CMB |
| Lowther Hill Radar | 289020 | 610710 | 158.91 | 85.80 | 37.60 | CMB |
| Perwinnes Radar | 392190 | 813510 | 79.44 | 42.90 | 182.10 | CMB |
| Tiree Radar | 96820 | 740140 | 292.37 | 157.87 | 87.07 | СМВ |
| NERL Nav Aid Sites | Easting | Northing | Range (km) | Range (nm) | Bearing (True) | Туре |
| None | | | | | | |
| NERL AGA Comms Sites | Easting | Northing | Range (km) | Range (nm) | Bearing (True) | Туре |
| None | | | | | | |

Table 2 - Impacted Infrastructure

3.1. En-route radar technical assessment

3.1.1.Predicted impact on NATS's 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. No impact is anticipated.