

**ATLANTIC ARRAY
OFFSHORE WINDFARM
INITIAL CONSULTATION
AVIATION INTERESTS**

Document Information


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1 Introduction

1.1 Atlantic Array Offshore Windfarm Development

Cyrrus Ltd has been appointed by RWE Npower Renewables to address the aviation issues associated with the proposed development of the Atlantic Array offshore windfarm.

This document outlines the proposed development of the Atlantic Array windfarm in respect to the likely impact on aviation stakeholders.

The purpose of this document is to inform Aviation Stakeholders of any identified potential effects that the development of the Atlantic array windfarm may have on their particular operation.

This document is intended to form the basis for an initial informal consultation between the Developer and the Aviation Stakeholder to clarify the potential impact on aircraft operations and seek the views of the consultee regarding any mitigation which may be considered necessary.

2 Development Briefing – Aviation Consultees

2.1 The Proposed Atlantic Array Offshore Wind Farm development

On 4 June 2008 The Crown Estate launched its Round 3 leasing programme for the delivery of up to 25 GW (gigawatts) of new generation capacity from offshore wind by 2020.

In March 2009 RWE npower renewables submitted a bid to The Crown Estate under this third licensing round for UK offshore wind farms, and in January 2010 The Crown Estate announced that the RWE had been awarded the development rights for Bristol Channel Zone (Round 3 Zone 8), located in the outer Bristol Channel. RWE Npower Renewables are now developing a single project within the zone, the 1.5 GW Atlantic Array Offshore Wind Farm. Atlantic Array extends over approximately 492 km² in water depths of 23 to 56 metres and is located approximately 13km from the North Devon coast, 16km from the South Wales coast 13km from Lundy. The extent of the wind farm area is approximately 40km east-west and 24km north-south; see attached graphic. The proposed project benefits from having a connection agreement with National Grid, which will enable first power to be exported from the project in late 2015.

2.2 Applicant's Information

The proposal comprises an offshore wind farm located in the Bristol Channel off the south west coast of the UK, together with onshore connection infrastructure.

The Scoping Report (paragraphs 2.15 to 2.20) ([hyperlink below](#)) describes the proposals in more detail. As it is early in the development process the megawatt size of the turbines to be used is undecided. The offshore wind generating facility is based upon between 187 and 416 turbines with an expected installed capacity of approximately 1500 MW. The applicant states that the exact number of turbines is yet to be determined, though this will depend largely on the turbine size and capacity available at the time of procurement.

The offshore construction work is anticipated to commence in 2014 and expected to last for four years.

The key components of the offshore development are:

- Offshore wind turbines and their associated foundations;
- Meteorological masts and their associated foundations for monitoring wind speeds prior to and during construction and the performance of wind turbines during the operation phase;
- Offshore platforms (substations) supporting some of the wind farms electrical equipment, and possibly incorporating offshore facilities for operation and maintenance of the wind farm;
- Subsea array cables between the turbines and the offshore substations, and export cables between the offshore substations and the landfall.

2.3 Development Timeline

Below is a list of the key milestones of the Atlantic Array project during the development phase.

Quarter 2 2010	Scoping report submission (completed) ✓
Quarter 4 2011	Consent applications to be submitted for consultation
Quarter 2 2012	Consent applications to be sent to the Infrastructure Planning Committee

These timings may change as the project progresses.

If RWE Npower Renewables are successful in gaining consent to build Atlantic Array Wind Farm we anticipate first generation in 2015.

2.4 Scoping Report

RWE Npower Renewables has now submitted a Scoping Report to the Infrastructure Planning Commission (IPC) in relation to Atlantic Array Offshore Wind Farm.

The Scoping Report presents an overview of the project, site, surrounding area and potential impacts. RWE Npower Renewables has collated this information and submitted it to the IPC in order to seek its opinion on the proposed content, methodologies and key issues to be included in the Environmental Impact Assessment (EIA). The IPC has provided its scoping opinion following consultation with a range of statutory, and non-statutory, consultees. RWE Npower Renewables is also carrying out its own consultation with a range of stakeholders in order to further determine the scope of the EIA. The Scoping Report and IPC Scoping opinion documents are available to view on the IPC website at:

<http://infrastructure.independent.gov.uk/projects/scoping-and-screening-documents/>

2.5 Environmental Impact Assessment

RWE Npower Renewables is committed to developing an appropriate wind farm proposal for the Atlantic Array site. A detailed EIA will be undertaken to assess the potential impact of the proposed project on the biological, physical and human environment.

The Environmental Impact Assessment will feed into an Environmental Statement (ES) which will be submitted with the wind farm planning applications and provide a description of the proposed development, summarise its potential impact, and describe in detail the measures to be taken to mitigate those impacts.

2.6 Military and Civil Aviation

Consideration is being given to an adequate and appropriate level of consultation with all relevant statutory authorities on the potential effects on air space. Additionally, any design considerations considered necessary for the development, in line with current legislation and guidance best practice i.e. aviation warning lights, shape form and colour of turbine towers is also being taken into account. The applicant is following the Director of Airspace Policy's guidance on procedures for pre-application consultation.

The potential interference with military and civil aviation operations primarily through adverse effects on radar systems, and height of the turbines with the location of military low flying operations, has been noted and resolving these issues will form the main thrust of the consultation exercise.

2.7 Initial Aviation Consultation

The initial stage comprises an informal consultation with aviation stakeholders to identify affected aviation interests and determine the potential impact of the Atlantic Array on those stakeholders.

Once all aviation issues have been identified, suitable mitigation measures will be investigated and discussed with the individual stakeholders.

2.8 Formal Aviation Consultation

Once suitable mitigation strategies have been identified, a round of formal consultation will be undertaken with all aviation stakeholders.

FIGURE 1. ATLANTIC ARRAY AREA BOUNDARY OVERLAID ON AVIATION CHART

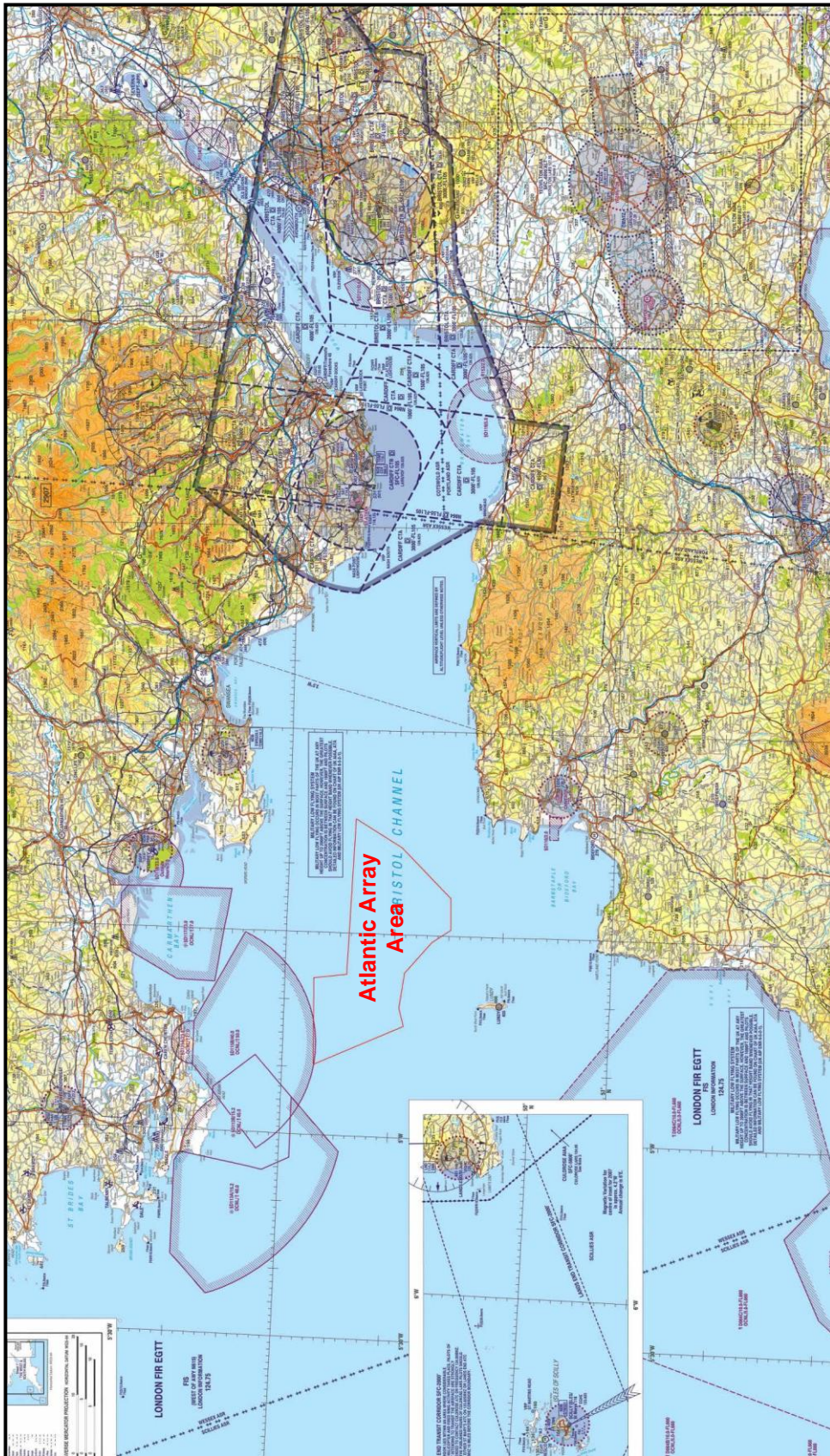


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3 Initial Aviation Consultation

3.1 General

Cyrrus Ltd would like to converse or meet with representatives to discuss any concerns that may arise from the development of the Atlantic Array offshore windfarm. At this stage, no mitigation proposals are in place, we merely seek to identify all issues and concerns.

Having undertaken a preliminary investigation of aviation issues as part of the Scoping Study, it is anticipated that various Air Traffic Service Providers may have concerns regarding Primary Surveillance Radar visibility of the turbines and the associated clutter that could result. However, please be assured that these issues are being addressed with those Air Traffic Service Providers individually.

3.2 Initial Consultation Agenda

The agenda proposed for the initial discussion is as follows:

- Development Briefing;
- Inputs from the attendees – concerns;
- Potential mitigation strategies;
- Summary;
- AOB.

Following the meeting, Cyrrus will issue a short summary of the issues raised and any follow-up actions.

3.3 Action Required

We would appreciate a response from you as to whether you consider the proposed Atlantic Array will cause the organisation that you represent any concerns and if you wish to hold a consultation briefing on the subject. Equally important is information to the effect that the proposal is not of concern to your organisation and an indication as to whether you wish to be consulted further on the subject or not; this will enable us to direct our attention and resources to those issues that will require greater consideration and focus.