

Corporate and International Affairs 25 Constitution Avenue (GPO Box 367) CANBERRA ACT 2600

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www.airservicesaustralia.com

ABN 59 698 720 886

Mr James Archdale NSW Planning & Infrastructure GPO Box 39 SYDNEY NSW 2001

James.Archdale@planning.nsw.gov.au

Dear Mr Archdale

Exhibition of Environmental Assessment for Bodangora Wind Farm

I refer to Toby Philips letter dated 4 June 2012 inviting Airservices submission to the Exhibition of Environmental Assessment for the Bodangora Wind Farm.

In August 2011 the proponent of the wind farm, Infigen Energy, was advised that Airservices required an Aviation Impact Study (AIS) to be submitted with all wind farm proposals to facilitate Airservices review of potential impacts to aviation.

To date Airservices has not received an AIS for this proposal. Consequently, without an AIS, we are not able to advise you on the potential aviation impacts including safety, efficiency and operational consequences for aerodromes in the vicinity of this wind farm.

Airservices will complete an assessment of this proposal on receipt of an AIS in accordance with the attached guidance material.

If you would like to discuss this further, please contact me on (02) 6268 5101 or e-mail joseph.doherty@airservicesaustralia.com.

Yours sincerely

Joseph Doherty Airport Development Manager

July 2012



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Airservices Aviation Assessments for Wind Farm Developments

Guidelines to manage the risk to aviation safety from wind turbine installations (Wind Farms/Wind Monitoring Towers) are under development by the National Airports Safeguarding Advisory Group (NASAG). NASAG is comprised of high-level Commonwealth, State and Territory transport and planning officials and has been formed to develop a national land use planning regime to apply near airports and under flight paths.

The wind farm guidelines will provide information to proponents and planning authorities to help identify any potential safety risks posed by wind turbine and wind monitoring installations from an aviation perspective.

Potential safety risks include (but are not limited to) impacts on flight procedures and aviation communications, navigation and surveillance (CNS) facilities which require assessment by Airservices.

To facilitate these assessments all wind farm proposals submitted to Airservices must include an Aviation Impact Statement (AIS) prepared by an aeronautical consultant in accordance with the AIS criteria set out below.

AIS must be undertaken by an aeronautical consultant with suitable knowledge and capabilities to provide a reliable and comprehensive report. All data is to be supplied in electronic form. If you are not familiar with any aeronautical consultants, you may wish to view the list on the Civil Aviation Safety Authority (CASA) website:

http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC 90412

AIS Criteria

The AIS must provide a detailed analysis covering, as a minimum:

Airspace Procedures:

To Whom It May Concern

- 1. Obstacles
 - Co-ordinates in WGS 84 (to 0.1 second of arc or better)
 - Elevations AMSL (to 0.3 metres)
- 2. Drawings
 - Overlayed on topographical base not less that 1:250,000. Details of datum and level of charting accuracy to be noted.
 - Electronic format compatible with Microstation version 8i.

- 3. Aerodromes
 - Specify all registered/certified aerodromes that are located within 30nm (55.56km) from any obstacle referred to in (1) above.
 - Nominate all instrument approach and landing procedures at these aerodromes.
 - Confirmation that the obstacles do not penetrate Annex 14 or OLS for any aerodrome. If an obstacle does penetrate, specify the extent.
- 4. Air Routes
 - Nominate air routes published in ERC-L & ERC-H which are located near/over any obstacle referred to in (1) above.
 - Specify two waypoint names located on the routes which are located before and after the obstacles.
- 5. Airspace
 - Airspace classification A, B, C, D, E, G etc where the obstacles are located.

Navigation/Radar:

- 1. Detect the presence of dead zones
- 2. False target analysis
- 3. Target positional accuracy
- 4. Probability of detection
- 5. Radar coverage implications
- 6. We would expect the analysis to follow the guidelines outlined in the EUROCONTROL Guidelines on How to Assess the Potential Impact of Wind Turbines on Surveillance Sensors.

http://www.eurocontrol.int/surveillance/public/standard page/sur WTTF.html

Airservices Review of AIS

Airservices will review the quality and completeness of an AIS and will undertake limited modelling and analysis to confirm the findings and recommendations of the report.

Provided the AIS is of sound quality and is complete in accordance with the above criteria, there will be no charge for the review or limited modelling and analysis.

If the AIS is not of sound quality or is not complete in accordance with the above criteria, no modelling or analysis will be undertaken. Airservices will advise the proponent that the AIS does not meet the requirements and that the proposal cannot be assessed by Airservices.

If Airservices review of an AIS confirms impacts identified in the report (or identifies additional impacts), Airservices will advise the proponent of the impacts and the required mitigating actions (where mitigation is feasible). The proponent will also be advised that there will be charges for any mitigation actions to be undertaken by Airservices.

These charges may be advised at the time but it is likely that a detailed quote will be needed and this will only be provided on request from the proponent.

Please contact Joe Doherty, Airport Development Manager (02) 62685101 or alternatively joseph.doherty@airservicesaustralia.com if you have any questions.

Current as at 5 March 2012