Dear Mr Holland

I refer to your recent emails raising concerns about risks to the safety of operations at Crookwell Aerodrome posed by the proposed Gullen Range Wind Farm project.

As you would be aware, the Gullen Range Wind Farm project has been assessed and approved by the NSW Minister for Planning under the NSW Environmental Planning and Assessment Act 1979.

The NSW Government approval for the project recognised the importance of the Crookwell Aerodrome as a base for local fire fighting operations and flight training. Based on discussions with the Civil Aviation Safety Authority (CASA), NSW Rural Fire Service and flying schools, only the 73 wind turbines located at least 3.6 km away from Crookwell Aerodrome were approved.

In addition I understand the approval conditions for the project require the proponent to notify CASA, Airservices Australia and the Department of Defence of the detailed geographic coordinates of the wind turbines prior to the commencement of operations.

This Department recognises the precautionary approach to the safety of aviation operations at Crookwell Aerodrome taken by the NSW Government in its assessment of the project.

The National Airports Safeguarding Framework, agreed by the Commonwealth, State and Territory governments at the May 2012 meeting of the Standing Council on Transport and Infrastructure, provides guidance to State/Territory and local government decision makers, airport operators and developers of wind farms to jointly address the risk to civil aviation arising from the development, presence and use of wind farms and wind monitoring towers.

Guideline D of the Framework advises that wind turbines may create turbulence which is noticeable up to 16 rotor diameters from the turbine. This quantitative parameter is based on international research and is consistent with the position of the Civil Aviation Authority of the United Kingdom. In the case of the Gullen Farm project, I understand the longest rotors near the aerodrome will be 105 metres in diameter, which means the potential noticeable turbulence would not be experienced more than 1.7 km from the turbines. The 3.6 km exclusion zone which has been mandated by the NSW Government should ensure that turbulence from the rotors is not experienced in the immediate vicinity of the aerodrome.
As you may also be aware, there are existing warnings in relation to naturally generated wind effects including turbulence at Crookwell Aerodrome. For example, the En Route Supplement Australia entry for Crookwell advises of:

*turbulence due to Gullen range to West; downdraughts over west end Gullen range in westerly winds.*

I have also noted your view that registration or certification of Crookwell Aerodrome under Part 139 of the Civil Aviation Safety Regulations 1998 (CASR Part 139) could make a difference to the location of the approved wind turbines. However, I further note that the conditions of approval for the project have adopted equivalent conditions to CASR Part 139, stating that:

*Turbines have been selected for deletion from the project based on the Inner Horizontal and Conical Surfaces identified for a Code 2, Non-instrument runway under Manual of Standards Part 139 – Aerodromes (Version 1.4) (Civil Aviation Safety Authority, April 2008).*

I am also advised that the proponent has complied with the conditions relating to provision of information to CASA, Department of Defence and Airservices Australia. I understand that a temporary Notice to Airmen (NOTAM) will be issued during construction of the wind turbines and a permanent NOTAM issued on completion of construction.

The Department recognises the importance of compliance with the conditions of approval for this project and has written to the NSW Department of Planning and Infrastructure to seek confirmation of the approval conditions and to reinforce the importance of maintaining safe operations at Crookwell Aerodrome.

Based on the evidence and the conservative approach taken by the NSW Department of Planning in the assessment, I do not share your concerns of any aviation safety risks from wind-turbine generated turbulence posed by the Gullen Range project to users of Crookwell Aerodrome. However, the Department shares your commitment to high standards of aviation safety and I thank you for raising this matter.

A copy of this letter will be sent to the aerodrome operator, Upper Lachlan Shire Council. If you have any questions, please call Mr Dilip Mathew, Director- Aerodrome Precincts on 02-6274-6544 in the first instance.

Yours sincerely,

[Signature]

Scott Stone
General Manager
Aviation Environment Branch
Aviation and Airports Division

17 October 2012

cc: General Manager, Upper Lachlan Shire Council, Crookwell NSW 2583