



Australian Government

Civil Aviation Safety Authority

AIR NAVIGATION, AIRSPACE AND AERODROMES

File Ref: F18/796

1 March 2018

Mr Tim Stuckey
Environmental Assessment Officer
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Stuckey,

PROPOSED WHITE ROCK WIND FARM, GLEN INNES, NSW

Thank you for your email dated 8 February 2018 requesting CASA comment regarding the White Rock Wind Farm Modified Stage 2 (MOD 6) development near Glen Innes, NSW.

The proposal seeks to use larger Goldwind GW140 turbines with a maximum tip height of 200 m and an increase in total turbines to 118.

Due to their height above ground level, CASA considers the turbines to be a potential hazard to air navigation. The risk can be suitably mitigated by the installation of steady red medium intensity hazard lights installed in accordance the NASF Guideline D – Wind Turbines, para 35 to be operational at night and at times of reduced visibility.

ICAO recommends that: *the obstacle lights should be installed on the nacelle in such a manner as to provide an unobstructed view for aircraft approaching from any direction.* (Ref ICAO Annex 14 Vol 1 para 6.2.4.4).

NASF Guideline D – Wind Turbines, para 36 states: *To minimise the visual impact on the environment, obstacle lights may be partially shielded, provided it does not compromise their operational effectiveness.*

Should such lighting be considered a negative impact on visual amenity and result in resident objection, CASA would recommend that an Aircraft Detection Lighting System (as recommended in the United States Federal Aviation Administration Advisory Circular AC 70/7460-1L CHG1 – Obstruction Marking and Lighting), be installed. Such a system would only activate the light when an aircraft is detected in the near vicinity and deactivate the light once the aircraft has passed. This would be a reasonable and feasible alternative to having the light activated from dusk to dawn and in low light levels during the day and would ensure aviation hazard lighting is implemented in a manner that minimises visual intrusion to surrounding residences.

In support of subpart 175.E of the Civil Aviation Safety Regulations 1998, CASA recommends that all permanent obstacles 100 m or more above ground level are reported to the Aeronautical Information Service (AIS) provider, Airservices Australia.

Any decision to require or to not require lighting remains with the planning authority to determine.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M. Windebank', with a stylized flourish at the end.

Matthew Windebank
Aerodrome Engineer