

Wind Farms and Aviation

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Newsflash Update

Today's Panel Report for the proposed Golden Plains Wind Farm contained interesting new approaches to balancing wind energy and aviation. Kellehers Australia recently assisted a submission that articulated the impact of three turbines close to an existing private airstrip, and the impact on aerial spraying and related agricultural activity.

This article continues KA's earlier Newsflash on Competing Issues - Wind Farms in Victoria.

The Golden Plains wind farm is proposed within an agricultural area widely used for cropping and grazing. Aerial operations occur, including from airstrips on private farm land. The Panel identified key issues as:

- Aircraft safety;
- Aerial agricultural operations;
- Aerial firefighting operations; and
- The need for aviation hazard lighting.

Proximate neighbouring farm owners submitted that the single directional airstrip on elevated land on their property, that they shared with some ten surrounding landowners, would become unusable due to the location of three of the proposed turbines. The nearest alternative airstrip was 15km away and its use placed unacceptable additional costs on local farmers. Local flight operators supported this submission, noting that a take off toward the turbines into prevailing winds left insufficient safe distance for a loaded agricultural aircraft to gain sufficient height and turn. They noted that there is no CASA (Civil Aviation Safety Authority) prescribed or proposed buffer distance.

The farm owners also referred to the additional hazard of turbine wake affects, referring to British wind turbine guidelines that had the effect of requiring greater turbine setback distance. They also submitted that wake turbulence may increase ground level wind speed and turbulence, making aerial spraying less effective and creating risk of spray drift.

The aviation consultant for the windfarm argued that it had no obligation to provide for the ongoing operation of a private airstrip on adjoining land and sought to rely upon comments in the earlier Stockyard Hill Panel Report that private airstrips cannot expect to dictate land use matters on adjacent land.

The Panel's key concern in the Golden Plains Report was that it had insufficient, uncertain and inconsistent evidence. It noted a need for specific evidence of the types of aircraft using the airstrip, their climbing rates, distances, safe turning points and directions. It also noted the need for adequate engagement with the airstrip owners and users and an adequate inspection of airstrip.

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It accepted that this airstrip provided a local service and wider social (use of local businesses), economic (lower spraying costs) and environmental (reduced greenhouse gas emissions) benefits. If the airstrip were rendered unviable, in its view this seemed inconsistent with a ‘social licence’ for the project within the community.

The Panel stated that it was reluctant to remove turbines arbitrarily and required that (prior to construction of the three turbines) an aircraft safety assessment be prepared demonstrating that the safe operation of the airstrip would not be significantly impacted by the three turbines.

The Panel acknowledged that wind speed may be higher at the hub than ground level in wind shear conditions and that turbines may create wake turbulence and increase in downwind wind speed at ground level – thereby making conditions unsuitable for aerial spraying and/or cause spray drift. However, it considered that this issue alone was manageable in this case.

On the other key aviation issues, it found insufficient evidence of impact upon aerial fire fighting and no need for hazard lighting on turbines.

The Golden Plains Panel Report adds interesting further approaches to the balance of aviation with wind energy.

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