Bowman's Creek Wind Project

SSD-10315

Aviation Submission to IPC

Grant Piper (Chair, National Rational Energy Network Inc.)

1.0 Low Flying due Stresss of Weather: The Epuron EIS states that aircraft under Visual Flight Rules (VFR) must remain above 500ft and clear of obstacles, but ignores the higher risk situation of low cloud, poor weather or visibilty.

1.1 Aircraft flying under the VFR are permitted to descend below 500ft if due stress of weather. Visibility is relaxed to 5km, aircraft must must remain clear of cloud/smoke and in sight of ground or water (Ref: AIP ENR1.2). Further reduction in visibilty is allowed to 1500m for fixed wing or 800m for helo, if below 140 knots airspeed.

1.2 The off-white colour of the turbines will not contrast with rain, cloud or smoke especially in low-light conditions. Obstacle lighting and high-visibility markings would be of benefit in these conditions. Only considering the fine weather situation ignores the poor weather case which is when most terrain collision accidents occur. Doing a risk assessment matrix then failing to include the worst-case is deceptive and negligent.

2.0 Aerial Firefighting: The RFS response is inadequate and contrary to its objctives of 'minimise the impact of fire and other emergencies by providing the highest standards of training, community education, prevention and operational capability' (Ref: RFS website). They appear not to want to make any negative assessment of this and all other wind projects.

2.1 Stating that routine aviation risk management strategies are used does not address the fundamental problem. Routine risk management will dictate that Large Air Tankers, and probably Small Air Tankers as well, stay clear of turbine areas when visibility is obscured by smoke.

2.2 Aerial firefighting will be restricted in and adjacent to the project area. The site terrain is mostly steep hills and valleys making access, whether by ground or air, difficult. In smoke and with turbulence air tankers will have to stay outside of or well above turbine areas, thus making them ineffective.

2.3 During the 2017 Sir Ivan bushfire aerial firefighting was used effectively. Large fixed-wing KC10, C130 as well as helicopters. All these aircraft dropped retardant from well below 722ft - the height of the Bowmans Creek turbines. To lose the option of large fixed-wing in turbine areas will reduce firefighting effectiveness significantly. Helicopters are excellent at point-protection but not capable of suppressing a broad fire front.

2.4 There are no mitigation strategies that could rectify the situation. Dropping from a higher altitude is contrary to the objective of getting retardant on to the fire, as it must be effective or it is a waste of time and money, and puts people in greater danger than otherwise.

2.5 That leaves local landowners/neighbours who make up the bulk of the volunteer RFS compelled to fight the fires on the ground within the turbine areas, exposing them to greater

risk. These same neighbouring non-host landowners probably opposed the project and voiced concerns about the fire risk and the detrimental impact on aerial firefighting.

2.6 *This is not equitable and cannot be discounted as inconsequential or an acceptable risk. Particularly so if those non-host farmers opposed the projects and identified the potential problem years prior to construction*.

3.0 Aerial Agriculture: As for fire fighting, aerial agriculture in close proximity or between turbines is going to be curtailed. No honest risk-assessment would send an employee pilot into that hazardous environment. Helicopter work is significantly more expensive than fixed wing and is a poor substitute, and still would be significantly restricted by where it could be safely operated.

4.0 Conclusion: The Epuron EIS regarding impact on aviation is faulty in detail and does not consider the highest-risk cases in its risk assessments.

Author's CV:

Bachelor of Engineering (Aeronautical) UNSW.

Member, Royal Aeronatical Society

Ex-RAAF Pilot, DFSM, AASM

1600hrs experience on the C130 Hercules transport (type used as LAT in 2017-2020 fire seasons).

1400 hrs experience as Forward Air Controller - operating at low level directing Close Air Support aircraft and artillery - similar to fire spotting.

Civil Low Level Endorsement to operate below 500ft.

Endorsed to fly aerobatics to ground level.

Authorised to train and issue Aerobatic Endorsements to ground level.

NSW RFS Volunteer 20+ years with recent experience at Sir Ivan fire 2017 and Flaggs Road fire 2019 where use of RFS aerial assets was closely observed.