UPC/VOTW EIS

Aviation Response and General Comments

- **1.0 Introduction:** We live at 'Peridot' 703 Tongy Lane, Coolah. This is east of the UPC windfarm by ~4km at ~550m AMSL elevation. We are not associated with the project but have been shown as an 'Associated Dwelling' in all of the UPC literature. This is a fundamental error, and displays UPCs careless approach to 'extensive consultation'.
- **2.0 Affected Airfields**: Ref. EIS Conclusions Para.6. This statement is incorrect. OZRWYS uses available Airservices Australia data for registered airfields only, but conducted its own surveys for minor airfields/ALAs not listed with Airservices. OZRWYS only surveyed those airfields it knew of, mostly based off the now defunct AOPA Airfield Guide. This ignorance of reality is why UPC has not considered the windfarm impact on many farm airfields, even major ones such as at Turee Station. UPC needs to talk directly with landholders to determine the location of ALL airfields before making general statements and reaching erroneous conclusions.
- **3.0 Lowest Safe Altitude:** Ref. EIS Conclusions Para.14.-17. Lowest Safe Altitude (LSALT) is not determined as described in this section. LSALT must provide at least a 1000ft buffer above any obstacle within the 'grid' or along a published air route (Ref. Airservices AIP GEN Section 4.0). Conclusions Para.15. statement that turbine MH25 (3373ft AMSL) is below the current grid LSALT of 4000ft is correct but once MH25 is built the grid LSALT will have to be lifted to 3373ft + 1000ft = 4373ft, then rounded up to 4400ft an increase of 400ft. To illustrate this error Para.17 states that air route W627 LSALT will have to increase from 3300ft to 3400ft, due to MH25s height of 3373ft this would give only a 27ft clearance above the turbine. This is not a safe margin nor how LSALT is calculated.
- 3.1 In bad weather with a low freezing level, forcing light aircraft to fly higher to stay above the LSALT can result in hazardous icing. A 400ft increase in LSALT can have a large impact on the ability of light aircraft to fly a certain route on a bad weather day, and the flight may have to be cancelled altogether, with associated inconvenience and economic impact.
- **3.2** The fact these gross errors appear in the 'Conclusions' of the EIS shows the inadequacy of UPCs basic knowledge and research.
- **4.0 Wake Turbulernce:** EIS Conclusions Para. 25.i. acknowledges wake turbulence may affect aircraft operations in the circuit of Coolah and Tongy Airstrips (must apply also to Turee). The severity of the wake turbulence is not stated in an aviation recognisable term such as 'Light, Medium or Heavy', thus it is impossible to assess the potential effect on aircraft in the circuit. Wake turbulence behind large RPT aircraft has been researched extensively and safe separation to following small aircraft can be up to 7NM (~13km). Coolah, Tongy and Turee Airfields are all closer than 7NM from planned turbines. Light aircraft with low wing loadings are more susceptible to turbulernce.
- **4.1** Tongy Local Considerations: My home airfield is Tongy Airfield though I operate at various locations around the district depending on the weather and the flight objective. The majority of my flying is low level aerobatic training for competition. I am authorised to conduct aerobatics to ground level and as an Instructor can train and endorse others to conduct aerobatics to ground level. This is a demanding activity where safety depends on conscious recognition and mitigation of all potential hazards. The consequences of an error or unexpected event can be

quickly lethal. Having unknown amounts of turbulence is hazardous to my activities and will probably deny use of Tongy and the adjacent local area to me and my students depending on the wind.

- **4.2** UPC needs to provide quantitative guidance of the turbulence hazard. If not already available, wake turbulence severity downwind of turbines in various wind states needs to be collected, and preferebly ranked in aviation terms so a valid risk assessment can be made by pilots. Without this information no informed safety decision can be made.
- 5.0 Obstacle Lighting: As the turbines are all located on high ground, all those in the vicinity of an airfield should be lit per standard aviation hazard practice. While Tongy Airfield and most farm airfields do not have night lighting an arrival/departure at dawn/dusk/in poor visibility would obviously be safer with obstacle lighting. Coolah Airfield itself did have portable lighting available, and the possibility of night operations should be catered for with obstacle lighting. Additionally, Coolah Airfield is in a valley surrounded by hills, so any departure or arrival in low light or cloud conditions would have aircraft flying lower over the adjacent hills putting them potentially in conflict with unlit white turbines a similar colour to the prevailing mist, rain or cloud.
- **6.0 Consultation:** I served on the Warrumbungle Shire Council Airfields Committee and no correspondence regarding wind farm development was presented in that forum as far as I know. Further, UPC has never contacted myself, as user, or Tongy Station, as owner, of Tongy Airfield regarding possible wind farm effects. To state that 'appropriate and justified', consultation was undertaken is an outright lie.
- **7.0. Firefighting:** During the 2017 Sir Ivan bushfire aerial firefighting was used effectively. Large fixed-wing KC10, C130 as well as helicopters. 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.
- **8.0 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.
- **9.0** Conclusion: The UPC EIS regarding impact on aviation is faulty in detail and consistently understates or ignores the real-world hazards to pilots and aircraft. No useful data is provided for the turbulence hazard and major agricultural airfields are not even known of by UPC, let alone considered (eg. Turee). This level of unprofessional carelessness gives me no confidence in the remainder of the report. The EIS arrogantly assumes everyone but UPC will make changes in their lives and business to enable a min-cost (to UPC) windfarm, such as not being able to effectively fight bushfires, so that more profit can be extracted by UPC.
- 9.1 Outside of the aviation impacts, the pure visual pollution of very large turbine a few kilometres away from our home and workplace concerns me, as does the negative effect this will have on the market value of our property. At the community meeting in Dunedoo on 15 June 2022, Mr Mike Young from NSW Planning stated that future offshore windfarms 'would be 20km offshore so they won't have to look at them'. Are we not due the same standards and respect as coastal residents?
- 9.2 As a foreign-owned profit-making entity, UPC does not automatically command any

community goodwill regarding the common good. In fact this project is counter to Community and National interest in the long term as it will incur social division as well environmental and financial costs. The short-term financial benefit for some, such as enabling more gambling on the National Energy Market ,will cost the rest of us. Few long term skilled jobs will be created locally as all the turbine components will be imported from overseas (China/Taiwan/Denmark?). We do not manufacture any of this in Australia. If the political desire is to promote investment and skilled long term jobs then training and manufacturing facilities should be established prior to building the windfarm.

9.2 In the most recent Federal Election the Green primary vote was less than 5% in the Parkes electorate and less than 3% in Coolah. This is a clear indication that wind and solar projects of this scale are not ranked as a high priority by local residents. UPC would do better to propose such projects in the Green and Teal electorates.

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