

Appendix 8: Aviation Impact Assessment (AIA) Addendum

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By email: tbuchan@umwelt.com.au

Our reference: 102206.02

Dear Thomas

Re: Bullawah Wind Farm – Response to NPWS

Aviation Projects has considered the submission from the National Parks and Wildlife Service (NPWS) regarding the aviation impact assessment (AIA).

1.1. NPWS Submission – Aviation content

NPWS provided the NSW Department of Planning, Housing and Infrastructure (DPHI) with a submission in response (DOC24/762572) to the AIA prepared for the proposed Bullawah Wind Farm Project (SSD-50505215) as a component of the Environmental Impact Statement (EIS). The Aviation-related component of NPWS' submission is provided below.

Their key issues are based upon their view that “*inadequate consideration of NPWS’s use of aviation, including use of nearby helipads*” and that the AIA “*was prepared without consultation with NPWS.*”

The AIA is therefore inadequate. It fails to mention operational helipads currently used by NPWS within 30 km of the proposed wind farm. NPWS highlights that a recorded helipad exists just off Wargam Road (known as ‘Booororban’ which is used for aerial shooting purposes near SWWNR) and another is located in Oolambeyan NP (known as the Old Cricket Pitch). NPWS also highlights that temporary aircraft landing facilities, or emergency landing can occur anywhere on NPWS estate during state of emergency operations or medical evacuations.

The proposed project will contain 143 WTGs, with a maximum blade-tip height of 300m above the ground. The ground elevation for the highest WTG location (WTG33) is 103m AHD, which with a 300 m WTG height, will result in a maximum overall height of 403m AHD. It therefore poses a significant aviation hazard.

Recommendations:

3. As part of the RTS, revise the AIA and associated mitigation measures to ensure:

- a. Consideration of the proposal’s proximity to uncertified aerodromes (i.e. recorded helipads), including the Booororban helipad and the Old Cricket Pitch, as well as the boundary of NPWS-managed lands*
- b. Assessment of the proposal’s impacts and influence on low flight and low visibility based aerial operations for both rotary and fixed wing aircraft.*

c. Meteorological masts constructed prior to the turbines are appropriately lit and marked to ensure they are visible to aircraft in accordance with NASF Guideline D, with the location and height of all masts reported to NPWS prior to commencement of installation as an interim measure.

d. Safety risk assessments are revised based on the additional information affecting NPWS and emergency aerial operations (low flight and low visibility), with a conclusion on the maintenance of acceptable levels of safety in this locality and a review of the need for obstacle lighting.

1.2. Aviation Projects' Response

Direct responses are provided below.

- a. Consideration of the proposal's proximity to uncertified aerodromes (i.e. recorded helipads), including the Boooroorban helipad and the Old Cricket Pitch, as well as the boundary of NPWS-managed lands*
- b. Assessment of the proposal's impacts and influence on low flight and low visibility based aerial operations for both rotary and fixed wing aircraft.*

The Boooroorban helicopter landing site (HLS) is located near the South West Woodland Nature Reserve (SWWNR) but cannot be identified using aeronautical data that is publicly available or on Google Earth.

NPWS advice is that it is located on Wargam Road near the SWWNR.

The nearest section of the SWWNR is located approximately 24 kilometres from the nearest wind turbine within the Bullawah Wind Farm. At this distance the HLS and helicopter operations to and from it, would not be affected by the wind farm.

Helicopters operating under the visual flight rules (VFR) and operating below 700 ft over land require a flight visibility of 800 m and must maintain a speed that enables them to avoid terrain and obstacles. As the proposed wind farm is located approximately 24 km from SWWNR the wind farm will not have any impact on the ability of helicopters to operate at the Boooroorban HLS.

The Old Cricket Pitch HLS is located 14 kilometres from the nearest wind turbine within the Bullawah Wind Farm. At this distance the HLS and helicopter operations to and from it, would not be affected by the wind farm.

They do not need to be considered in the AIA.

The southern boundary of the Oolambeyan National Park abuts the Bullawah Wind Farm.

NPWS helicopter and fixed wing aircraft operations in the area are required to be operated in accordance with appropriate Civil Aviation Safety Authority Regulations (CASR) relevant to their operations, in particular the Visual Flight Rules, and minimum altitudes and distances from obstacles (i.e. houses, etc).

The following CASRs apply to flight activity likely to occur in the area:

- Part 61 – Flight crew licencing
- Part 91 – General operating and flight rules
- Part 133 – Australian air transport operations rotorcraft
- Part 137 – Aerial application operations
- Part 138 – Aerial work operations.

The wind turbines are highly visible from a significant distance in visual meteorological conditions and can be identified and avoided by both fixed wing and helicopter pilots. The minimum flight visibility required for flight under the VFR by fixed wing aircraft flying at heights below 3000 ft AMSL is 5000 m, a sufficient distance that enables pilots to see the wind turbines and to avoid them.

Due to the nature of NPWS flight operations, they are considered as “Aerial Work Operations” and as such require a specific “aerial work certificate” issued by CASA under CASR Part 138. Low level flying operations by authorised organisations using authorised aircraft flown by authorised pilots require extensive pre-flight study of intended flight paths and areas of operation. The study of topographical and aeronautical charts form a basis for determining the location of potential hazards and therefore safe operating areas and detailed information from local landholders and NPWS would provide further information of the location of wind turbines near to the national park. This will enable NPWS and other pilots to plan their flights to avoid the wind turbines.

Section 4.2.3 of the Submissions Report provides a detailed response to NPWS advice on the EIS, including the impact of the proposal on firefighting operations, with due regard to the Oolambeyan National Park Fire Management Strategy (OEH 2014).

The proponent will prepare a Bush Fire Emergency Management and Operations Plan (BFEMOP) in consultation with the RFS and RFNSW for implementation as part of the Project. The BFEMOP will include protocols to:

- enable liaison with the relevant fire and land management agencies (including NPWS) that is ongoing and effective
- ensure access is available to the Project Area by emergency services response for on-ground firefighting operations
- if possible, shutdown WTGs to facilitate access for aerial firefighting.

Further bushfire and emergency management measures are presented in Appendix 3 of the Submissions Report.

c. Meteorological masts constructed prior to the turbines are appropriately lit and marked to ensure they are visible to aircraft in accordance with NASF Guideline D, with the location and height of all masts reported to NPWS prior to commencement of installation as an interim measure.

d. Safety risk assessments are revised based on the additional information affecting NPWS and emergency aerial operations (low flight and low visibility), with a conclusion on the maintenance of acceptable levels of safety in this locality and a review of the need for obstacle lighting.

All wind farm data will be provided to NPWS when final location details are determined.

Aviation Projects has conducted an aviation risk assessment that considers the need for the lighting of the wind turbines and wind monitoring towers in the AIA for the planning authority to consider. It is contained in Section 7 of the AIA.

CASA will be provided with the details of the wind farm infrastructure and will provide the planning authority with recommendations related to obstacle lighting on both wind turbines and wind monitoring towers. The two installed met masts with heights up to approximately 110 m AGL are marked in accordance with CASA guidelines as stated in the AIA.

CASA's advice on the EIS considers that the wind turbines should be provided with obstacle lighting. Aviation Projects has provided an obstacle lighting plan (OLP) that is being assessed by CASA and has been submitted with the Submissions Report to address DPHI's advice on the EIS. The OLP is included as Appendix 9 of the Submissions Report.

“temporary aircraft landing facilities, or emergency can occur anywhere on NPWS estate during state of emergency operations or medical evacuations”

Under CASR the pilot is responsible for ensuring that a place intended for landing or take-off is suitable for safe flight operations.

Flight operations can occur throughout the national park and surrounding areas. Pilots must be aware of local obstacles and terrain to ensure the safe operation of the aircraft.

Conclusion

Aviation Projects thanks NPWS for their submission regarding the project and stands by the content of the AIA.

The content of the AIA clearly outlines the details of the wind farm and the likely impacts to aviation activity which, along with the NPWS submission, will be considered by the appropriate planning authority.

If you wish to clarify or discuss the contents of this correspondence, please contact me on 0424 110 501.

Very best regards



Peter White

Manager Aviation Safeguarding

7 January 2025