14. Aviation Correspondence

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part of a planning process under the ply - Rye Park Wind Farm and Wimmera Plains Energy Facility [SEC=OFFICIAL]

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OFFICIAL

Hi Peter,

In the past year or so, CASA has resolved to only review a wind farm proposal when it is referred to us via the planning authority. This removes issues that have arisen in the past with consulting firms arguing with the CASA position, modifying their proposal to seek a better CASA response or drawing CASA into long and arduous negotiations on lighting and the impacts that aviation hazard lighting has on neighbouring property owners and the potential backlash associated which can see a proposal refused by the planning authority due impact on visual amenity.

As you may be aware CASA does not have any rules or regulations that cover the construction, lighting or marking of tall structures away from certified or registered aerodromes, apart from a requirement for the location and height of these to be reported to Airservices for inclusion on maps and charts for the benefit of pilots. We only provide advice. The final decision on whether to approve or not approve a wind farm, with or without conditions such as lighting rests with the relevant planning authority.

Our concern is primarily for the safety of vfr aircraft as they are permitted to fly as low as 500ft AGL. This equates to roughly 150 m AGL. While the rules require pilots to plan to be clear and above tall structures, it cannot be ruled out that pilots may drift off the planned track, may be forced lower due to weather or may not be fully situationally aware for various reasons. Therefore CASA has taken the position that structures above 150 m AGL should be lit. At CASA's discretion we will review the location, proximity of aerodromes, whether there is a desire line between two aerodromes that will take vfr aircraft over the structure etc and may recommend either lowering the lighting requirement from the ICAO medium intensity flashing red lighting (2,000 cd), to medium intensity steady red, or low intensity steady red (200 cd). We no longer recommend flashing red lighting due to the increased negative impact on local residents.

With turbine blade heights now reaching well above 200m AGL, CASA has taken the position of recommending medium intensity steady red for any structure exceeding 200 m AGL unless there are exceptional circumstances (an example being the large wind farm proposed for the Sandy Desert where there is next to no vfr traffic). Below 200 m AGL CASA will consider low intensity or no lighting as viable options depending on the variables mentioned above and on the information contained in the aeronautical impact assessment.

Therefore in the case of the Rye Wind Farm (80 turbines at 200 m AGL blade height) and Wimmera Plains Energy Facility (54 turbines at 250 m AGL blade height) CASA's position is likely to be (when officially reviewed following submission from the planning authority) a recommendation of medium intensity steady red lighting installed to a lighting plan as per the NASF guideline D. To minimise lighting impact on local residents CASA would also recommend T S E D This copied document to he made available vation, or lighting activated by low visibility measuring equipment.

for the sole purpose of enabling its consideration and review as part of a planning process and earlier process and expression. Visibility measuring equipment would reduce intensity to 200 Planning and the isomeway her 1987 ditions and increase it to 2,000 cd when visibility is poor.

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purpose which may breach any Apologies for the late response, I left on leave on 13th December and am only now getting to your emails. For a quicker turn around could I suggest that any future correspondence come through to the airspace.protection@casa.gov.au email to ensure that there is a pool of people who can answer if one of us is not available.

I hope this assists. Please feel free to reply or call if you need further clarification.

Regards

Matthew Windebank

Team Leader – Airfield Infrastructure & Development Air Navigation, Airspace & Aerodromes Branch CASA \ Aviation Group GPO BOX 2005 CANBERRA ACT 2601

T - 02 6217 1183

F - 02 6217 1500



From: Peter White <pwhite@landrum-brown.com>

Sent: Friday, 13 December 2019 9:58 AM

To: Windebank, Matthew < Matthew. Windebank@casa.gov.au>

Subject: Rye Park Wind Farm

Good morning Matthew,

Landrum and Brown have recently completed an Aeronautical Impact Assessment for the proposed Rye Park Wind Farm, approximately 55 km north of Canberra, Our client, Tilt Renewables has instructed me to provide it to the Aviation Authorities for consideration and approval.

for the sole purpose of enabling The proposed wind farm will infringe the LSALT protection surface for five air routes and we seek its consideration and review as part of a planning process under the LSALT on them from 3800ft, 3900 ft and 4100 ft, all to 4200 ft. Grid Planning and LSAVI source the Plannin

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fine AlA will be provided to Airservices Australia and Defence for consideration and approval.

I am available to assist with any queries you may have arising from the AIA.

Kind regards,

Peter White

Managing Consultant - Airspace Safeguarding

Landrum & Brown

Global Aviation Planning & Development T +613 9639 7744 M+ 61 (0)424 110501

landrum-brown.com

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I refer to your request for an Airservices assessment of the property development at Wimmera Plains Energy Facility.

Airspace Procedures

With respect to procedures designed by Airservices in accordance with ICAO PANS-OPS and Document 9905, at a maximum height of 181m (594ft) AHD, the power line poles will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Horsham Airport.

The power line poles will not affect any air route.

Note that procedures not designed by Airservices at Horsham Airport were not considered in this assessment.

Communications/Navigation/Surveillance (CNS) Facilities

This property development will not adversely impact the performance of Precision/Non-Precision Navigational Aids, HF/VHF Communications, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links.

Vertical Obstacle Notification

As soon as construction commences, the proponent must complete the Vertical Obstacle Notification Form for tall structures and submit the completed form to VOD@airservicesaustralia.com. For further information regarding the reporting of tall structures, please contact (02) 6268 5622, email VOD@airservicesaustralia.com or refer to the web link below:

http://www.airservicesaustralia.com/services/aeronautical-information-and-management-services/part-175/

Kind regards,

William Zhao

Advisor Airport Development

Tower Road, Melbourne Airport, Tullamarine VIC 3043

t 03 9339 2182

e airport.developments@airservicesaustralia.com

Website



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Planning and The pieces myon the ctpl 1817 e @landrum-brown.com>

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Hi Peter,

I have received your proposal and commenced the Airservices assessment, which takes approximately 6 weeks for completion.

If you have any questions, please contact the Airport Developments team and quote assessment code: $VIC\text{-}WF\text{-}045\ P2$

Please note that all completed Airservices assessments are also forwarded to CASA.

Regards,

William Zhao

Advisor Airport Development

Tower Road, Melbourne Airport, Tullamarine VIC 3043

t 03 9339 2182

e airport.developments@airservicesaustralia.com

Website



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From: Peter White <<u>pwhite@landrum-brown.com</u>>

Sent: Friday, 31 January 2020 3:04 PM

To: Airport Developments < <u>Airport.Developments@AirservicesAustralia.com</u>>

Subject: RE: VIC-WF-045 - Wimmera Plains Energy Facility, Wind Farm [SEC=UNCLASSIFIED]

Good afternoon William,

Here is the response from the client, with the data requested.

I hope it is ok.

Have a great weekend.

Peter White

Managing Consultant - Airspace Safeguarding

Landrum & Brown

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Sent: pintay, 31 January 2010 1:43 PM

To: Peter White <pwhite@landrum-brown.com>

Subject: VIC-WF-045 - Wimmera Plains Energy Facility, Wind Farm [SEC=UNCLASSIFIED]

Hi Peter,

For the assessment of the power line, could you please provide a list of the power line poles coordinates and maximum height in metres AHD.

Regards,

William Zhao

Advisor Airport Development

Tower Road, Melbourne Airport, Tullamarine VIC 3043

e airport.developments@airservicesaustralia.com

Website



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From: Peter White <<u>pwhite@landrum-brown.com</u>>

Sent: Thursday, 30 January 2020 8:19 AM

To: Airport Developments < <u>Airport.Developments@AirservicesAustralia.com</u>>

Subject: RE: AIRSERVICES RESPONSE: VIC-WF-045 - Wimmera Plains Energy Facility, Wind Farm

[SEC=UNCLASSIFIED]

Good morning William, Richard,

The client for this wind farm has advised that they also propose a power line connecting the wind farm to the grid.

This power line is laterally within the approach splays for Horsham airport but we have assessed it as not infringing the PANS OPS surfaces.

Obviously Airservices Australia needs to be aware of this proposed power line and to do their own assessment of the impact of it, if any.



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Planning and Waving Marking to send this report back to PDS for assessment of the powerline please?

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Peter White

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From: Airport Developments Airport.Developments@AirservicesAustralia.com

Sent: Wednesday, 29 January 2020 3:15 PM **To:** Peter White pwhite@landrum-brown.com>

Cc: 'Airspace Protection' < <u>Airspace.Protection@casa.gov.au</u>>

Subject: AIRSERVICES RESPONSE: VIC-WF-045 - Wimmera Plains Energy Facility, Wind Farm

[SEC=UNCLASSIFIED]

Hi Peter,

I refer to your request for an Airservices assessment of the wind farm for the Wimmera Plains Energy Facility.

Airspace Procedures

With respect to procedures designed by Airservices in accordance with ICAO PANS-OPS and Document 9905 at the maximum height of 394m (1293ft) AHD, the wind farm will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Horsham Airport.

The wind farm will not affect any air route.

Note that procedures not designed by Airservices at Horsham Airport were not considered in this assessment.

Communications/Navigation/Surveillance (CNS) Facilities

This wind farm, to a maximum height of 394m (1293ft) AHD, will not adversely impact the performance of Precision/Non-Precision Navigational Aids, HF/VHF Communications, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links.

Vertical Obstacle Notification

As soon as construction commences, the proponent must complete the Vertical Obstacle ERTISED

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Kind regards,

William Zhao

Advisor Airport Development

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e airport.developments@airservicesaustralia.com

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From: Peter White pwhite@landrum-brown.com>

Sent: Friday, 20 December 2019 11:30 AM

To: Airport Developments <<u>Airport.Developments@AirservicesAustralia.com</u>>

Subject: RE: VIC-WF-045 - Wimmera Plains Energy Facility, Wind Farm [SEC=UNCLASSIFIED]

Thanks very much William.

Cheers.

Peter White

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From: Airport Developments < <u>Airport.Developments@AirservicesAustralia.com</u>>

Sent: Friday, 20 December 2019 11:28 AM

To: Peter White < <u>pwhite@landrum-brown.com</u>>

Subject: VIC-WF-045 - Wimmera Plains Energy Facility, Wind Farm [SEC=UNCLASSIFIED]

Hi Peter,

I have received your proposal and commenced the Airservices assessment, which takes LERTISED

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Planning and Flansiconnent Acail 28 mpleted Airservices assessments are also forwarded to CASA.

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Regards,

William Zhao

Advisor Airport Development

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t 03 9339 2182

e airport.developments@airservicesaustralia.com

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From: Peter White <<u>pwhite@landrum-brown.com</u>>

Sent: Thursday, 19 December 2019 11:47 AM

To: Airport Developments <<u>Airport.Developments@AirservicesAustralia.com</u>>

Subject: RE: Wimmera Plains Energy Facility - Horsham Victoria [SEC=UNCLASSIFIED]

Good morning William,

Here is the data your require.

Please let me know if it meets your requirements or if you need any other information.

Have a great day.

Peter White

Managing Consultant - Airspace Safeguarding

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From: Airport Developments < Airport. Developments @ Airservices Australia.com > ADVERTISED

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Planning and Environment Act 1987.

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A list of wind turbine was not provide in the AIA report. Could you please provide a list of wind turbine coordinates, maximum height and ground elevation preferable in a spreadsheet.

Regards,

William Zhao

Advisor Airport Development

Tower Road, Melbourne Airport, Tullamarine VIC 3043

t 03 9339 2182

e airport.developments@airservicesaustralia.com

Website



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From: Peter White <<u>pwhite@landrum-brown.com</u>>

Sent: Monday, 16 December 2019 10:48 AM

To: Airport Developments < <u>Airport.Developments@AirservicesAustralia.com</u>>

Subject: Wimmera Plains Energy Facility - Horsham Victoria

Good morning Richard,

Landrum and Brown have recently completed an Aeronautical Impact Assessment for the proposed Wimmera Plains Energy Facility (ala wind farm), located approximately 8 km north east of Horsham aerodrome and 24 km south of Warracknabeal aerodrome, for BayWa R.E.Pty Ltd, who have instructed me to provide it to the Aviation Authorities for consideration and approval.

The proposed wind farm will infringe the 10 nm MSA PANS OPS surface by up to 90 ft and we seek approval to increase the 10 nm MSA from 2200 ft to 2300 ft.

The AIA will be provided to CASA and Defence for consideration and approval if necessary.

I am available to assist with any queries you may have arising from the AIA.

Kind regards and best wishes for the festive season,

Peter White

Managing Consultant - Airspace Safeguarding



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