



Australian Government
Civil Aviation Safety Authority



AIRSPACE AND AERODROME REGULATION

File Ref: F13/5007

Your ref: SSD_13 8039

31 August 2015

Mr Mike Young
Director
Resource Assessments
NSW Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Mr Young,

PROPOSED NEWTRICITY BIALA WIND FARM – NOTICE OF EXHIBITION

I refer to your letter of 13 August 2015 inviting comment on the proposed Biala Wind Farm Project.

On 4 May 2015 CASA recommended that the identified wind turbines on this project should be lit with steady red low intensity lighting at night. CASA confirms that this recommendation stands.

CASA has assessed the Environmental Impact Statement, which states that consultation with CASA regarding the requirement for obstacle lighting is ongoing and will be resolved prior to project approval.

The proponent's representative, ERM, write to CASA on this topic and we have responded. A copy of this correspondence is attached.

Yours sincerely

Dilip Mathew
Manager Aerodromes





Australian Government
Civil Aviation Safety Authority

AIRSPACE AND AERODROME REGULATION

File Ref: F13/5007

Doc Ref: D15/578259

24 August 2015

Ms Claire Burnes
Project Manager
ERM
Level 15, 309 Kent Street
SYDNEY NSW 2000

Dear Ms Burnes,

PROPOSED NEWTRICITY BIALA WIND FARM

I refer to your letter of 13 May 2015 requesting advice on whether the obstacle lighting at the proposed Biala wind farm is 'required' or 'recommended' and the height threshold for obstacle lighting.

As you are aware, CASA recommended the installation of low intensity steady red lighting on the turbines identified by the proponent to the Planning Authority, NSW Planning and Infrastructure. CASA's recommendations are provided as required under the National Airports Safeguarding Framework Guideline D: Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation.

In response to your question, CASA will make recommendations on lighting requirements that will vary from case to case based on the circumstances of each proposal.

NASF Guideline D has a section on lighting of wind turbines not in the vicinity of an aerodrome with a height of 150m or more and advises that CASA may determine whether the risks to aircraft safety would be reduced by the provision of approved lighting and/or marking.

As you may be aware, ICAO Annex 14 — Aerodromes, Volume 1 section 6.4 'Wind turbines' provides advice on marking and lighting of wind turbines. ICAO Section 4.3 'Objects outside the obstacle limitation surfaces' advises that objects which extend to a height of 150 m or more above ground elevation should be regarded as obstacles.

Our advice on lighting, provided pursuant to NASF Guideline D, is consistent with the ICAO position.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Dilip Mathew', written over a horizontal line.

Dilip Mathew
Manager Aerodromes

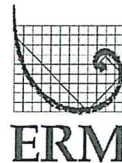
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13 May, 2015

Mr Dilip Matthew
Manager, Aerodromes and Aviation Infrastructure
Airspace and Aerodrome Regulation
Civil Aviation Safety Authority
PO Box 2005
Canberra ACT 2601

Via email: Dilip.Mathew@casa.gov.au

Our Reference: 0178462_LETTER CASA 130515.DOCX

Dear Dilip,

RE: PROPOSED BIALA WIND FARM

We refer to your correspondence to Mr Neville Osborne, Team Leader Infrastructure Projects, NSW Department of Planning and Environment, dated 4 May 2015, regarding the proposed Biala Wind Farm.

The draft Aeronautical Impact Assessment (including a detailed Obstacle Lighting Risk Assessment) prepared by Aviation Projects and forwarded to you on 11 February 2015, concluded that the proposed Biala Wind Farm will not require obstacle lighting to maintain an acceptable level of aviation safety. Although obstacle lighting was not recommended by Aviation Projects, a lighting design was prepared in order to enable consideration of potential visual impacts if obstacle lighting was required as a condition of approval.

According to the National Airports Safeguarding Framework Guideline D *Managing the Risk to Aviation Safety of Wind Turbine Installations (Wind Farms)/Wind Monitoring Towers*, the appropriate obstacle lights, if obstacle lighting is recommended by the Civil Aviation Safety Authority (CASA), are medium intensity obstacle lights.

We are unaware of any other recent examples of CASA recommending obstacle lighting for wind farms in Australia.

In the circumstances, CASA's recommendation regarding the lighting of wind turbines for the proposed Biala Wind Farm is relatively unexpected.

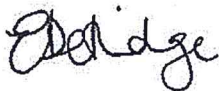
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In light of this, we respectfully request further detail so that we can better understand CASA's position on the matter of obstacle lighting:

1. Please clarify whether the lights are 'recommended' or 'required'. If they are required, please nominate the applicable regulation/standard. If they are 'recommended', please provide a more detailed explanation of the reasons for this recommendation.
2. Although the application will be for a maximum blade tip height of 185 metres above ground level, it is informative to understand at what overall blade tip height above ground level obstacle lighting would not be required. Please advise the height threshold for obstacle lighting on the proposed wind farm in case the proponent, Newtricity, selects a turbine model with a lower tip height.

We look forward to your response, however should you have any queries regarding this matter please contact Murray Curtis on 0427 423 383 or Erin Dethridge on 02 8584 8842.

Yours sincerely,
for Environmental Resources Management Australia Pty Ltd



Erin Dethridge
Project Manager



Murray Curtis
Partner