Eoin McCarthy

From: Eoin McCarthy

Friday 19 February 2021 16:32 Sent:

To: sxl@iol.ie

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Hi Joe,

Thank you for your response.

I would like to confirm that we have engaged a consultant to undertake a safety assessment on all IFPs for runway 28 at Sligo Airport.

The requirements set out by the IAA Safety Regulation Division are noted and will be undertaken by the developer prior to and as part of the construction of the proposed wind farm development.

Kind Regards,



Eoin McCarthy B.Sc. (Env.) Senior Environmental Scientist

Tuam Road, Galway Ireland, H91 VW84 +353 (0) 91 735611 www.mkoireland.ie





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From: sxl@iol.ie <sxl@iol.ie>

Sent: Friday 19 February 2021 11:18

To: Eoin McCarthy <emccarthy@mkoireland.ie>

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Eoin

My apologies for the delay in reply.

Based on our initial observation that the site 'does lie within the approach surface for Runway 28 at Sligo', a safety risk assessment on all runway 28 IFPs at Sligo Aerodrome will be necessary. (3 approved Instrument Flight Procedure Design Providers are listed on the **IAA** website).

The Irish Aviation Authority (IAA) Safety Regulation Division (SRD) have advised the following and is to be notified as detailed hereafter:

According to <u>S.I. 215 of 2005</u>, Irish Aviation Authority (Obstacles to Aircraft in Flight), the IAA SRD requires any person who seeks to erect a manmade object to notify the aerodrome operator of the intended operation <u>at least thirty days</u> in advance if the structure is to be erected in the vicinity of the aerodrome or the areas around the aerodrome and other protected surfaces associated with the aerodrome. Aerodrome Operators can be contacted via <u>IAA AIP AD 1.3 INDEX TO AERODROMES AND HELIPORTS</u>, to evaluate the impact of the intended operation on the protected airspace established for the aerodrome.

Additionally, any person who seeks to erect a manmade object in excess of 45 metres anywhere within the state above ground or water surface level must also notify the IAA SRD of the intended crane erection <u>at least thirty days</u> in advance, as a crane operating at or above this height may constitute an obstacle to air navigation. The IAA SRD can be contacted via <u>airspace@iaa.ie</u>.

The State requires electronic terrain and obstacle data (eTOD) in accordance with International Civil Aviation Organisation (ICAO) <u>Annex 15</u> requirements which shall be surveyed by <u>Ordnance Survey Ireland (OSi)</u>. The cost of this OSi surveyed data is to be borne by the developer. Additionally, the following data is to be supplied once construction is planned or commenced or available to the airspace team via <u>airspace@iaa.ie</u>:

- The WGS84 coordinates (In degrees, minutes and seconds) for each turbine?
- Height above ground level (to blade tip) and elevation above mean sea level (to blade tip)? Meters & feet
- Verification if it's a standalone wind farm or is merged with others. Does the wind farm have any alternative names?
- Horizontal extent (rotor diameter) of turbines and blade length where applicable? Meters & feet
- Lighting of the wind farm, which turbine(s) is/are lit, and what type of lighting?

ICAO Light Type	Colour
Low-intensity Type A (fixed obstacle)	Red
Low-intensity Type B (fixed obstacle)	Red
Low-intensity Type C (mobile obstacle)	Yellow/Blue
Low-intensity Type D (follow-me vehicle)	Yellow
Low-intensity Type E	Red
Medium-intensity Type A	White
Medium-intensity Type B	Red
Medium-intensity Type C	Red
High-intensity Type A	White
High-intensity Type B	White

Yours sincerely, Joe Corcoran

From: Eoin McCarthy < emccarthy@mkoireland.ie >

Sent: Wednesday 27 January 2021 07:39 **To:** sxl@iol.ie; joecorsxl@outlook.com

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Hi Joe,

Please see attached map.

Kind Regards,



Eoin McCarthy B.Sc. (Env.) Senior Environmental Scientist

MKC

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From: sxl@iol.ie <sxl@iol.ie>

Sent: Tuesday 26 January 2021 21:06

To: Eoin McCarthy < emccarthy@mkoireland.ie >

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Eoin

I haven't received the map attachment and may be related to issue I am having with my IOL e-mail.

Please copy to joecorsxl@outlook.com

Joe

From: Eoin McCarthy <emccarthy@mkoireland.ie>

Sent: Tuesday 26 January 2021 08:44

To: sxl@iol.ie

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Joe,

Thank you for your response. Please see attached the map that was attached to the original email for your own records.

Please see below an excerpt from Chapter 14 of the EIAR which sets out the requirements of the Department of Defence and IAA following consultation with these bodies during the pre-planning stage of the project.

These requirements will be implemented prior to the commissioning of the wind farm.

Department of Defence ¶

In February 2019, a scoping response was received from the Department of Defence out lighting requirements for turbines, as follows: ¶

- Single turbines or turbines delineating corners of a wind farm should high intensity obstacle strobe lights (Red).
 ¶
- 2.→ Obstruction lighting elsewhere in a wind farm will be of a pattern th hazard be identified and avoided by aircraft in flight. ¶
- 3.→ Obstruction lights used should be incandescent or of a type visible to Equipment. Obstruction lighting fitted to obstacles must emit light a (IR) range of the electromagnetic spectrum specifically at or near 85 of wavelength. Light intensity to be of similar value to that emitted it spectrum of light. ¶

→ Irish·Aviation·Authority¶

In January 2019, a scoping response was received from the Irish Aviation Authority requirements of the IAA include the following:¶

- 1.→ Agree an aeronautical obstacle warning light scheme for the wind fa
- 2.→ Provide as-constructed coordinates in WGS84 format together with p height elevations at each wind turbine location. ¶
- 3.→ Notify the Authority of intention to commence crane operations with days prior notification of their erection. ¶

Please see attached spreadsheet with the elevation of the proposed turbine blade tips above sea level.

Kind Regards,



Eoin McCarthy B.Sc. (Env.) Senior Environmental Scientist

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From: sxl@iol.ie <sxl@iol.ie>

Sent: Tuesday 26 January 2021 08:28

To: Eoin McCarthy <emccarthy@mkoireland.ie>

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Eoin

Thank you for your follow up e-mail, maybe I misfiled but cannot find the original.

On a very quick inspection it seems like the site is actually to the west/ south west of Drumkeerin and does lie within the approach surface for Runway 28 at Sligo. From the preliminary scan I don't think it will present an issue for Sligo Airport, however we will need to have this examined further to confirm this.

Can I check please if we can get the height above mean sea level for the turbine tips , and what proposals are in place for anti aircraft collision lighting.

Could I also check if the application has been referred to the Irish Aviation Authority for comment.

Many thanks Joe Corcoran

From: Eoin McCarthy <emccarthy@mkoireland.ie>

Sent: Monday

19:34

To: sxl@iol.ie

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Mr. Corcoran,

I am just following up on the below email.

If you have any comments or queries in relation to the proposed development and whether or not there is the potential for impacts as described above, please advise.

Kind Regards,



Eoin McCarthy B.Sc. (Env.) Senior Environmental Scientist

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From: Eoin McCarthy

Sent: Thursday 7 January 2021 10:32

To: sxl@iol.ie

Subject: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Dear Mr. Corcoran,

I am emailing in relation to the proposed Croagh Wind Farm development. The site straddles the border between Counties Leitrim and Sligo and is located approximately 5km east of the village of Drumkeeran, Co. Leitrim. The proposed development comprises 10 no. wind turbines (8 in Leitrim and 2 in Sligo) with a maximum ground to blade tip height of 170m and all associated infrastructure. An application for planning permission for the wind farm development was submitted to both Leitrim County Council and Sligo County Council in July 2020.

Leitrim County Council have since requested that we engage directly with Sligo Airport in order to ascertain whether or not there is any potential for impacts on flight procedures or communication, navigation and surveillance equipment. The distance between the nearest proposed turbine (T1) and the runway at Sligo Airport is 25.5km at its closest point. For ease of reference, please see attached a map showing the location of the proposed turbines relative to Sligo Airport. All application documentation, including the Environmental Impact Assessment Report, is available online at https://www.croaghwindfarm.ie/supporting-docs/. Turbine co-ordinates and elevations are included on Page 4-2 of Chapter 4 of the EIAR (https://www.croaghwindfarm.ie/media/2020/07/Ch.-4-Description-F-2020.07.06-180511.pdf).

Could you please come back to me, at your earliest, with any comments or queries you may have in relation to the proposed development and whether or not there is the potential for impacts as described above.

Kind Regards



Eoin McCarthy B.Sc. (Env.) Senior Environmental Scientist

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Eoin McCarthy

From: Eoin McCarthy

Sent: Monday 25 January 2021 19:34

To: info@irelandwestairport.com

Cc: marketing@irelandwestairport.com

Subject: RE: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Dear Sir or Madam,

I am just following up on the below email.

If you have any comments or queries in relation to the proposed development and whether or not there is the potential for impacts as described above, please advise.

Kind Regards,



Eoin McCarthy B.Sc. (Env.) Senior Environmental Scientist

MKO

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From: Eoin McCarthy

Sent: Friday 15 January 2021 10:38 **To:** info@irelandwestairport.com

Subject: 180511a- Proposed Croagh Wind Farm, Co. Leitrim & Co. Sligo

Importance: High

Dear Sir or Madam,

I am emailing in relation to the proposed Croagh Wind Farm development. The site straddles the border between Counties Leitrim and Sligo and is located approximately 5km east of the village of Drumkeeran, Co. Leitrim. The proposed development comprises 10 no. wind turbines (8 in Leitrim and 2 in Sligo) with a maximum ground to blade tip height of 170m and all associated infrastructure. An application for planning permission for the wind farm development was submitted to both Leitrim County Council and Sligo County Council in July 2020.

Leitrim County Council have since requested that we engage directly with Ireland West Airport in order to ascertain whether or not there is any potential for impacts on flight procedures or communication, navigation and surveillance equipment. The distance between the nearest proposed turbine (T1) and the runway at Ireland West Airport is 45.2km at its closest point. For ease of reference, please see attached a map showing the location of the

proposed turbines relative to Sligo Airport. All application documentation, including the Environmental Impact Assessment Report, is available online at https://www.croaghwindfarm.ie/supporting-docs/. Turbine co-ordinates and elevations are included on Page 4-2 of Chapter 4 of the EIAR (https://www.croaghwindfarm.ie/media/2020/07/Ch.-4-Description-F-2020.07.06-180511.pdf).

Could you please come back to me, at your earliest, with any comments or queries you may have in relation to the proposed development and whether or not there is the potential for impacts as described above.

Kind Regards



Eoin McCarthy B.Sc. (Env.) Senior Environmental Scientist

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