From: Jean-Francois Latour <<u>JeanFrancois Latour@transalta.com</u>> Sent: Friday, June 5, 2020 5:19 PM To: Monroe, Pamela <<u>Pamela.Monroe@sec.nh.gov</u>> Cc: Ethan Mollasalehi <<u>Ethan Mollasalehi@transalta.com</u>> Subject: Antrim Wind - ADLS light on statistics

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Dear Ms. Pamela Monroe,

Per your request regarding the Aircraft Detection Lighting System (ADLS), you'll find below a summary of the aerial obstruction light on time during the period between May 26 and June 3.

Those stats are extrapolated from the ADLS log comprise of hundreds, if not thousands, of lines; it is therefore an lengthy process to analyze the data, hence why only 8 days are presented here. Currently the system complies with the log of activity data requirement as per FAA Advisory Circular 70/7460-1L section 14.2.8 (*"Each ADLS installation should maintain a log of activity data for a period of no less than the previous 15 days."*), but it doesn't have the ability to export the light on time stats automatically (which is not a FAA requirement).

The data is presented on a per night basis representing the total duration of aerial obstruction light illumination (e.g. on the night of 26-27 May, lights were on for a total time of 0.31 hour between twilight on the evening of May 26 till sunrise on the morning of May 27). The table also presents the number of uncertainty events. These events refer to a 30-mins timer that keeps the lights on when an object tracking is lost or uncertain before exiting the Detection Zone (this is required per FAA AC 70/7460-1L section <u>14.2.2.1</u>: "[...] *In the event detection of the aircraft is lost while being continuously monitored within the 3 NM/1,000 foot (5.5 km/304 m) volume, the ADLS should initiate a 30-minute timer and keep the obstruction lights on until the timer expires.* [...]").

Night of	Lights on (hours)	Uncertainty event
26-27 May	0.31	0
27-28 May	0.62	1
28-29 May	0.00	0
29-30 May	2.12	4
30-31 May	0.03	0
31 May - 1 June	0.54	0
1-2 June	0.57	1
2-3 June	0.54	1

As confirmed by the ADLS manufacturer in a letter (May 1, 2020) we transmitted to your attention, the "[...] *ADLS systems, comprising of two radars are performing correctly and as designed in accordance with the aircraft detection lighting system (ADLS) requirements specified in Federal Aviation Administration (FAA) Advisory Circular (AC) 70/7460-1L [...]" and as such, "[...] the system is designed to only allow the obstruction lighting to be turned off when there is absolute certainty of no movement within the FAA determined Detection Zone."*

I hope this could put in perspective the performance of the AWE's ADLS. Thanks and have a great weekend!

Jeff L.

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