Damon, Jessica

From: James Palmer <palmer.jf@gmail.com>
Sent: Friday, October 02, 2020 11:23 AM
To: Damon, Jessica
Cc: James F. Palmer
Subject: Re: Visual Impact Mitigation Letter and Information
Attachments: Luminous Range chart.pdf; LED-RED-Standard_LG3_ENG.maj2020.pdf; Vestas ADLS.pdf; TC-18-22_Performance Assessment of the Vestas InteliLight™ X-Band System as an ADLS_07172018.pdf; Terma ADLS.pdf; TC-TN16-41_Performance Assessment of Terma OLC as an ADLS_090718.pdf; HARRIER ADLS.pdf; TC-TN17-58_Performance Assessment of the DeTect Harrier ADLS_07102018.pdf.pdf

Hi Jessica.

It is approximately 4 miles between Chemo Pond and the project. I have no idea how the dimming would effect visibility from that distance.

However, the entire purpose of the FAA lights is to warn away pilots, so they must be visible for a significant distance. In any case, they still will be flashing, which is a major reason they are obnoxious. They are not all that bright, but the flashing draws attention, which is why they flash.

I have attached the data sheet for the Technostrobe LED Red Beacon LED-RED-STANDARD-3, which was referenced in the sheet that Michael sent you. I have highlighted in light yellow the specification about the intensity of the dimmed light (LIDS). The standard is 2,000 candelas (cd), and there are reductions of 30% to 600 cd and 10% to 200 cd. I assume that the 10% LIDS option is for perfectly clear weather (e.g., visibility to 20 km).

I have also attached a chart to understand the visible range of lights of different intensity under different levels of atmospheric visibility. At the bottom of the chart are the Luminous Intensity scale in candelas. I have made a verticle up from 200 cd, or the lowest LIDS intensity. Assume that viewing conditions are perfect, this light is visible at approximately 16.5 nautical miles (M) or 19 statute miles. If the measured atmospheric visibility is 10 M, then the light is visible at approximately 7 M or 8 statute miles.

I am not an expert in lighting. However, based on the limited information available it appears to me that while the light may be dimmed, it will still be flashing and very visible on Chemo Pond. It was always a streatch to consider the elimination of lights a night as compensation for more turbines during the day. The proposed use of LIDS does not seem to eliminate the lights at night, so it is not at all clear that it is sufficient.

I do not know what model turbine they are proposing and the availbility of an Aircraft Detection Lighting System for that model of turbine. However, there do appear to ADLSs that have FAA approval. I have attached information about three of them. I would like to know why they are not proposing to use one of these approved systems rather than something that has not been approved.

Jim

> On Oct 2, 2020, at 8:59 AM, Damon, Jessica <Jessica.Damon@maine.gov> wrote:
>
> <Technostrobe LIDS Information.pdf>