#### STATE OF NEW HAMPSHIRE SITE EVALUATION COMMITTEE

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## **DOCKET NO. 2021-02 SUMMARY OF INVESTIGATION**

## I. Accounting of Operational Complaints

To assist the Investigatory Subcommittee in Docket No. 2021-02, I reviewed all dockets involving the Antrim Wind facility to make an accounting of all if operational complaints that have been made. Specifically, I reviewed the following dockets: (1) 2015-02, (2) 2015-02 Post-Certificate Filings, (3) 2019-01, and (4) 2021-02. I reviewed the filings in the dockets as well as the comments. I also reviewed the transcript of previous public meetings of the Subcommittee. Using my best efforts, I identified the operational complaints that are listed on the attached spreadsheet. Because there is no definition of what constitutes a "complaint," I flagged communications from neighbors or those affected by operations that allege certificate or regulatory violations. I did not include as complaints comments about the investigatory process, the Subcommittee's interpretation of rules, or any subject matter other than a complaint about a specific violation.

As the Spreadsheet shows, the only potential operational complaints that have not been addressed are (1) Richard Block's July 20, 2021 "comment" about the Aircraft Detection Lighting System ("ADLS"), (2) Richard Block's statements at the Subcommittee's February 2, 2023 and May 15, 2023 Public Meetings concerning the ALDS, and (2) five sound complaints from Ms. Berwick and Ms. Longgood. Those communications are all hyperlinked below.

### II. Status of Operational Complaints

As the Spreadsheet indicates, all operational complaints concerned either sound or the ADLS. The Subcommittee's May 31, 2023 Recommendation concerning disposition of sound complaints specifically referred to fifteen complaints covering multiple days. After reviewing the dockets, I labelled the following additional communications as sound complaints that were not listed in the Subcommittee's Recommendation:

- March 2, 2020 Barbara Berwick Communication
- May 14, 2021 Berwick and Others Communication
- July 1, 2021 Barbara Berwick Communication
- August 11, 2021 Janice Longgood Communication
- January 10, 2022 Janice Longgood Communication
- May 1, 2023 Janice Longgood Communication

The Subcommittee should note that I have labeled Ms. Berwick's communications as complaints even though she told the Subcommittee in her <u>May 1, 2023</u> <u>Communication</u> that she never filed a complaint after her first complaint.

In addition, erring on the side of caution, I deemed the following communications to be "complaints" concerning the operation of the ADLS,

- February 28, 2020 Richard Block Communication
- March 13, 2020 Barbara Berwick Communication
- April 30, 2020 Richard Block Communication
- August 13, 2020 Richard Block Communication
- March 25, 2021 Richard Block Communication
- July 20, 2021 Richard Block Communication
- April 28, 2023 Richard Block Communication
- February 2, 2023 Richard Block <u>testimony</u> at Public Meeting
- May 15, 2023 Richard Block testimony at Public Meeting

# III. Investigation of ADLS System

I conducted further investigation into the functioning of Antrim Wind's aircraft detection lighting system ("ADLS") in 2022-2023. Specifically, I obtained records from the facility documenting the percentage of nighttime hours the ADLS system illuminated per day during 2022 and 2023. The attached spreadsheet displays by day the percentage nighttime hours of illumination. I determined the following:

• The median time illuminated per day for the entire time period is 29.38%.

- The average time is 43.22%.
- The disparity between the median and average is explained by approximately 60 days of 100% illumination in 2022 and 100 days in 2023.

To determine why the system was illuminated 100% of the nighttime hours (or other abnormally large percentage), I conducted an investigation at the facility, including an inspection as well as interviews and communications with facility personnel and counsel. The facility reported that "during 2022 and 2023, there were two separate instances of equipment failures in the ADLS installed by Terma North America, Inc. ("Terma") that activated the lights for lengthy periods. The first period was for 55 days, beginning on June 13, 2022, and the second period was for 89 days, beginning on February 18, 2023. In both cases, the system outages were caused by equipment failures in the ADLS, which resulted in the lights defaulting to the continuous activation mode for public safety purposes. Consistent with Federal Aviation Administration requirements, at no time during either period were the lights not in operation during nighttime hours."

The facility reported that in the June 2022 incident "the transformer that powers the 30m ADLS tower failed, which required complete replacement by Terma. When one of the two radars is not functioning, the lights go into ON mode in the dark or nighttime hours. After replacing the transformer, Terma determined that the Lightning Control Server (LCS) had also failed and needed to be replaced."

With regard to the February 2023 incident, the facility reported that "an air conditioning unit in the T30 radar failed. The air conditioning unit is located

inside the radar enclosure within the tower and is responsible for ensuring that the radar is operating within the specified temperature range. Terma ordered a new unit, which was shipped from Europe, and which required a specialized support team from the manufacturer to perform the installation."

To assess these assertions, I inspected the facility and interviewed the facility's manager. I was able to view the components that failed. The components and parts necessary for repairs come from a single manufacturer that is also responsible for conducting installation/repair work. The delay in installation and repair for both incidents was caused by a shortage in parts. Once the parts were obtained, the manufacturer of the system conducted the necessary installation and repairs.

Also attached are trendlines from the facility showing percentages of time illuminated by month for the time period in question.

Andrew Biemer Administrator Site Evaluation Committee