

From: Michael Vose <Michael.Vose@leg.state.nh.us>
Sent: Thursday, May 6, 2021 12:32 PM
To: Martin, Dianne <Dianne.Martin@puc.nh.gov>
Cc: Bob Giuda <Bob.Giuda@leg.state.nh.us>; Ruth Ward <Ruth.Ward@leg.state.nh.us>; Jeb Bradley <Jeb.Bradley@leg.state.nh.us>
Subject: Presumptive Certificate Compliance Default

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Commissioner Martin,

Please help me understand how TransAlta, the parent company of Antrim Wind Energy (AWE), can arbitrarily decide to violate the terms and conditions of its site certificate. According to the attached email sent to you on April 30, 2021, the company has decided to default on certificate compliance with regard to turbine lighting until the end of May.

RSA 162-H:12, 1 says that when a violation has been detected, the SEC can, "order the person to immediately terminate the violation. If, 15 days after receipt of the order, the person has failed or neglected to terminate the violation, the committee may suspend the person's certificate."

Since AWE has likely been out of compliance with its certificate since the first of the year, the time would seem to be long past to begin a proceeding to revoke the facility's permission to operate. The firm's track record of failure to comply, ongoing now for over four months, does not inspire confidence that they will become compliant by May 31.

Please explain why the SEC has taken no action on this obvious compliance failure.

--Rep. Michael Vose, Chair
Science, Technology, & Energy Committee
Rockingham District 9
Epping, NH

From: Martin, Dianne <Dianne.H.Martin@puc.nh.gov>
Sent: Friday, May 7, 2021 8:16 AM
To: Michael Vose <Michael.Vose@leg.state.nh.us>; Evans, Jonathan <Jonathan.A.Evans@dot.nh.gov>; Lavallee, Jon <Jon.D.Lavallee@doj.nh.gov>; John-Mark Turner <jturner@sheehan.com>; Scott, Robert <Robert.R.Scott@des.nh.gov>
Cc: Bob Giuda <Bob.Giuda@leg.state.nh.us>; Ruth Ward <Ruth.Ward@leg.state.nh.us>; Jeb Bradley <Jeb.Bradley@leg.state.nh.us>
Subject: Re: Presumptive Certificate Compliance Default

Dear Chairman Vose,
Thank you for your correspondence. This issue and your complaint are being referred to the investigative subcommittee established in Docket 21-02. This falls squarely within the mandate of the subcommittee.
Thank you,
Dianne

**STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE**

MINUTES – Finalized June 17, 2021

SUBJECT: Investigation of Antrim Wind Energy Facility

DATE OF PUBLIC MEETING: May 21, 2021

LOCATION OF PUBLIC MEETING: Virtual meeting held via Zoom

The following Subcommittee members were present as confirmed through roll-call:

Jonathan Evans (Presiding Officer) – NH Dept. Of Transportation

George Kassas – Public Member

John Duclos – NH Dept. of Environmental Services

Individuals Appearing before the Subcommittee:

Michael Haley –Site Evaluation Committee counsel, NH Dept. of Justice

John-Mark Turner – Subcommittee investigatory counsel, Sheehan Phinney Bass & Green

Presiding Officer Jonathan Evans called the public meeting to order upon the successful log in of all three subcommittee members, after observing multiple members of the public had access to the meeting and announcing the beginning of the recording.

J. Evans began by providing the following opening statement:

Good afternoon. We are here today for a public meeting of the Site Evaluation Subcommittee established in docket 2021-02. This meeting is being held by remote access due to COVID-19 concerns. Because of that, I'm required to make certain findings before we proceed.

As the presiding officer of this subcommittee, I find that due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic, and in accordance with the Governor's Emergency Order No. 12, pursuant to Executive Order 2020-04, this public body is authorized to meet electronically.

Please note that there is no physical location to observe and listen contemporaneously to this meeting which was authorized pursuant to the Governor's Emergency Order. However, in accordance with the Emergency Order, I am confirming that we are utilizing the Zoom platform for this electronic meeting. All members of the subcommittee have the ability to communicate contemporaneously during this meeting through this platform, and the public has access to contemporaneously view and listen to this meeting as it occurs.

We previously gave notice to the public of the necessary information for accessing the meeting in the meeting notice that was issued last week (05/12/2021). The notice was posted in compliance with the State's Right-to-Know law and distributed to all individuals who are on the SEC's public meeting distribution list. If anybody has a problem accessing this meeting, please call (603) 271-2431. In the event the public is unable to access the meeting, it will be adjourned and rescheduled.

Please note that all votes that are taken during this meeting shall be done by roll call vote.

Let's start the meeting by taking a roll call attendance. When each member states their presence, please also state whether there is anyone in the room with you during this meeting, which is required under the Right-to-Know law.

The subcommittee members and counsel announced their presence and confirmed their remote participation in locations where no other individuals were present.

The following agenda items were addressed:

1. May 6 Email from Rep. Michael Vose regarding Aircraft Detection Lighting System ("ADLS") upgrade work.
 - a. Whether to accept the May 6 Email as a Complaint warranting investigation.

J. Evans offered that he was of the opinion that this was a complaint that should be addressed by the subcommittee in accordance with the Site Evaluation Committee's (SEC) orders. J. Duclos offered that he supported considering this a complaint worth discussing. G. Kassas motioned to consider the May 6 Email from Rep. Michael Vose to be considered a complaint that would be investigated by the subcommittee. G. Kassas moved to consider the May 6 Email from Rep. Vose a complaint that should be investigated by the Subcommittee. Second: J. Evans. A roll call vote was conducted: J. Evans, yes; J. Duclos, yes; and G. Kassas, yes. Unanimous. **MOTION PASSED.**

- b. Whether the upgrade work violates the facility's Certificate or the SEC rules and what, if any, actions the subcommittee will recommend that the SEC take in the event that a violation has occurred.

J. Evans offered that in reviewing the information that was available, particularly that provided by Antrim Wind it is apparent that that the temporary shutdown is the result of Antrim Wind trying to address the issues brought up by the public related to the ADLS system turning the lights on too frequently. He noted that it appears that in order to do this maintenance the system needs to be shut down and as a result, in order to comply with Federal Aviation Administration (FAA) regulations, the lights need to stay on until the ADLS system is once again fully operational. He suggested that the Subcommittee could encourage Antrim Wind to conduct the ADLS upgrades as expeditiously as possible.

G. Kassas offered that he agreed with the statements of J. Evans that maintenance of any technology is part of normal operation.

J. Duclos offered that the Certificate of Site and Facility does not offer much on the operating standards for aircraft lighting and that the ADLS system was presented by the applicant as a means to limit the lighting from their facility. He noted that at the time of the application, the FAA did not have standards for the use of ADLS for wind farm facilities. He also acknowledged the challenges of

implementing the first ADLS wind farm application in the challenging New England conditions and that a complex system such as this is likely to have some initial bugs that need to be fixed in order to operate properly and protect life and property. He offered that he felt the facility was in compliance with the certificate and that performing these upgrades is the right thing to do.

Discussion ensued that while keeping the lights on during finite maintenance efforts such as this does not appear to be a violation of the certificate, the Subcommittee should continue to monitor the operation of the ADLS system as its investigations continue.

G. Kassas suggested that facility owner consider how it might notify the public and other stakeholders of future maintenance operations to the ADLS system. Further discussion ensued about how to handle the committee's best management practice recommendations to the facility operator. It was agreed that the Subcommittee's recommendation to the full SEC should be limited to addressing the Subcommittee's charges and any recommendations on best management practices would simply be documented in the meeting minutes and recording as part of the public record.

J. Duclos noted that there was a letter from what appeared to be the ADLS system designer, Terma North America Inc. dated May 17, 2021 that mentioned a flight test. He encouraged the facility to test the ADLS system with actual flights. J. Evans noted that the results of such a test would also be helpful as the subcommittee moved forward with its investigations into some of the other ADLS complaints. He encouraged the facility to provide the results of such testing when the subcommittee is considering the details of those complaints.

J. Evans motioned to recommend to the full committee that there is no violation of the Certificate and that the subcommittee is recommending that no enforcement action be taken. Second: J. Duclos. A roll call vote was conducted: J. Evans, yes; J. Duclos, yes; and G. Kassas, yes. Unanimous. **MOTION PASSED.**

Discussion ensued on including the reasons why the Subcommittee was recommending there was no violation of the certificate and that no enforcement action be taken. J. Duclos suggested that the facility needs to and has been meeting the current FAA Advisory Circular for Obstruction Marking and Lighting that requires that if for some reason the ADLS system needs to be shut down, the lights need to stay on. He went on to explain that he felt the facility was trying to get the ADLS system operating properly for the betterment of all stakeholders.

J. Duclos motioned that the Subcommittee allow J. Evans, the Presiding Officer, to write a letter to the full SEC that states that the Subcommittee reviewed the complaint by Rep. Vose, looked at the Certificate of Site and Facility, identified the two ADLS requirements that are in the Certificate and that the Subcommittee believes that there has been no violation of the certificate and that no enforcement

action is recommended. Second: J. Evans. A roll call vote was conducted: J. Evans, yes; J. Duclos, yes; and G. Kassas, yes. Unanimous. **MOTION PASSED.**

2. Discussion of Investigative Plan:

J. Evans identified that as a result of comments received since the last meeting, it was apparent that the Subcommittee's investigative plan needed to include some additional opportunities for both written and verbal public comment. As a result, several draft changes were made to the Subcommittee's investigative plan which were sent to the Subcommittee for review in advance of the meeting. The subcommittee spent some time going through the elements of the draft plan which identified additional opportunities for public comment. J. Duclos suggested it could be beneficial to conduct a site visit while the subcommittee was considering the sound measurement and analysis methodologies in Charge 1 as well as in advance of the complaint investigations in Charge 2. After some discussion, the Subcommittee clarified it would conduct any site visit during Step 4 of its Plan.

It was agreed that while some of the timelines identified in the plan were aggressive, the Subcommittee would do its best to meet these deadlines. The Subcommittee also agreed that this plan should remain a living document and that if at any time it appeared that additional time or efforts were necessary to properly address any of the charges; they would consider additional revisions to the plan.

J. Evans motioned to adopt the May 21, 2021 investigative plan. Second: G. Kassas. A roll call vote was conducted: J. Evans, yes; G. Kassas, yes; and J. Duclos, yes. Unanimous. **MOTION PASSED.**

3. Other Items:

The Subcommittee acknowledged that updated orders from the full SEC were provided by Chairwoman Martin on May 20, 2021. These updated orders provided clarity on original SEC orders and addressed several questions posed by the Subcommittee subsequent to the April 20, 2021 meeting. The Subcommittee concluded that the updated orders were fairly clear that it has been charged with investigating any and all complaints, an extension beyond December 31, 2021 would be allowed if necessary, and that an extension of the deadline for Charge 1 was granted but that the committee should focus on the NH laws, rules and the facilities certificate.

All those present agreed to adjourn the meeting at approximately 12:10 PM.

State of New Hampshire
Site Evaluation Committee

www.nhsec.nh.gov
21 South Fruit St., Suite 10
Concord, New Hampshire
03301-2429
Telephone (603) 271-2435
Fax (603) 271-4033



Dianne Martin
Chairwoman

Robert R. Scott
Vice-Chair

May 24, 2021

Via Electronic Mail Only

Dianne Martin
Chairwoman
Site Evaluation Committee
21 South Fruit Street, Suite 10
Concord, NH 03301

RE: Docket No. 2021-02
Investigations of Complaints Regarding Antrim Wind Energy Facility

Dear Chairwoman Martin,

On May 21, the Investigatory Subcommittee held a public meeting in the above-captioned matter. At the meeting, the Subcommittee adopted the attached Updated Investigative Plan. The Plan outlines the steps the Subcommittee plans to take over the next several months to carry out its charge.

The Subcommittee also reviewed the May 6, 2021 complaint from Rep. Vose. That complaint contends that the Antrim Wind facility is violating its Certificate by putting its aircraft detection lighting system ("ADLS") in "override" mode for approximately four weeks to conduct maintenance and upgrade work on components of the system. While in override mode, the facility's aircraft lighting is illuminated continuously. With regard to the ADLS system, the Certificate requires, in relevant part, that

- "this Certificate is conditioned upon compliance with all conditions of the Determinations of No Hazard to Air Navigation issued by the Federal Aviation Administration which are appended hereto as Appendix IV." Certificate at page 4.
- Antrim Wind "file . . . the Federal Aviation Administration's determination of no hazard pertaining to the [ADLS] that will be installed on the Project upon its receipt." Certificate at page 9.

After reviewing comments and materials submitted by interested parties, the Subcommittee concluded that the ongoing maintenance and upgrade work and the "override," did not violate either of these provisions. The Subcommittee decided that the ADLS in override mode did not violate any FAA requirements and therefore complied with the conditions of the Determinations of No Hazard. The Subcommittee also found that Antrim Wind previously filed the FAA's Determination of No Hazard

relating to the ADLS. The Subcommittee had extensive discussion to further explain its reasoning, which is captured in the minutes from the public meeting. Those will be posted in the docket for matter 2021-02.

The Subcommittee therefore recommends to the full Committee that it (1) find no violation of the Certificate with regard to the Vose complaint, and (2) undertake no enforcement action on the complaint.

Sincerely,



Jonathan Evans
Presiding Officer
Site Evaluation Subcommittee in Docket No. 2021-02
Email jonathan.a.evans@dot.nh.gov
Phone: (603) 271-4048

cc: John Duclos, NHDES (via e-mail)
George Kassis (via e-mail)
Michael Haley, NHDOJ (via e-mail)
John-Mark Turner (via e-mail)

DRAFT MINUTES

SITE EVALUATION COMMITTEE PUBLIC MEETING

July 21, 2021 at 1:30pm

The following Committee members were present as confirmed through roll-call:

Chairwoman Dianne Martin;
Vice-Chairman Robert Scott;
Commissioner Dan Goldner
Commissioner Victoria Sheehan;
Director Wilfred Arvelo, as designee for Commissioner Taylor Caswell;
Michael York as designee for Commissioner Sarah L. Stewart;
Susan Duprey, Esq., Public Member;
George Kassas, Public Member;
Thomas Eaton, Alternate Public Member (remote);
Robert Baines, Alternate Public Member; and
Lisa Noe, Alternate Public Member (remote).

Also present:

J.D. Lavalley, Assistant Attorney General;
Michael Iacopino, retained counsel to the Committee.

Chairwoman Martin called the meeting to order.

The following public meeting agenda items were addressed:

- 1. Approval of Minutes from May 24, 2021 Meeting – Motion to Approve as modified** – struck redundant reference to “Marguerite” on page 2. Corrected reference to Committee member Arvelo to Wildolfo.
Unanimous.
- 2. Updates on administrative matters.**

Chairwoman Martin updated the Committee regarding the legislative committee created by HB2 to review the Committee and the funding and posting of the administrator position. Discussion regarding concern about filling the position when it might not continue after the legislative review. Vice-chair Scott recommended posting the position with understanding it would not be filled until after the report of the Committee. Ms. Duprey asked about the labor grade and funding for the position. She also raised the question as to whether the number of projects warrants filling the position full-time and permanently. Commissioner Scott responded that the complaints and enforcement work related to compliance, as well as calls regarding process, and other concerns, would support the position.

Chair Martin provided an update on the work of the investigative subcommittee.

Update on the website improvements and viewing of new website.

Update on Seacoast Reliability reporting in Docket 2015-04 from Attorney Iacopino. Monitoring at the UNH property has come to a close. PH monitoring continues. Drought had caused concern regarding revegetation but recent rain has helped. Salt marsh monitoring is by agreement with DES and will continue for five years. Dispute resolution process has some identified potential disputes that may use that process. The Committee is not involved – it is a separate process.

3. Eversource Correspondence dated May 28, 2021, Notice of Transmission Line Maintenance on the A111 Line.

a. Public Comment regarding the Eversource A111 from:

- i. Marguerite Francis – Ms. Francis provided comment regarding her concerns about excavation and building of a road by Eversource by her home without notice to her and answered questions from the Committee. Ms. Francis shared that the letters sent out to property owners on the M127 line partial rebuild last June did not communicate the magnitude of what was going to be happening. Work on her property started after July 4, 2020. The project took about 6 months or longer. The Committee heard from Ms. Francis twice, the second time to give her an opportunity to respond to Eversource's comments including concerns about the permitting process through the town and the NHDES compliance process.
- ii. Eversource – comment by Joe Purington (as well as Erik Newman and others from Eversource) and answered questions regarding outreach to property owners, condition of the line, height of the poles and potential interference with views, permitting, and related proceedings before the PUC. Eversource provided description of improvements and maintenance to transmission line. Recent physical inspection showed need to work on 10 mile area in Franklin, Hill area. Wires were outdated.

b. Committee continued discussion of Transmission line maintenance on the A111 line and next steps. Commissioner Scott noted there was no request from Eversource before the Committee related to the correspondence and noted that there is a venue for at least a complaint about a public utility to be lodged with the Department of Energy. Ms. Duprey shared a concern that the work on this

line may have been on the line or over the line of “sizable” and expressed concern about the impacts on the property and the need for a forum for these concerns to be heard. Ms. Duprey recommended sending a letter to Eversource saying we have serious concerns about whether this triggers jurisdiction. Mr. Kassas asked if there would be an increase in the load. Ms. Duprey made a motion that the Committee send a letter to Eversource expressing concern about whether or not they reached jurisdictional requirement of sizable change. There was no second.

4. **RSA 162-H:8-a, III, the Committee’s annual review and evaluation of the application and filing fees contained in the fee schedule established by RSA 162-H:8-a, II**

Committee discussion of the fees received during FY 21 and related expenses. Chair Martin noted there were three dockets during the FY. The related fees totaled \$3,600. Two of the dockets did not have an associated fee (one is an investigative subcommittee and one is a petition for jurisdiction that met the statutory requirements to be excluded from the filing fee requirement. Expenses fall into two types: 1. Docket related including primarily Department of Justice and Compensation to Committee members. 2. Expenses not specifically associated with a docket, these expenses are generally ongoing, including the administrator expenses, IT, etc. The Chair noted the requirements for review including sufficiency of the fees and a recommendation to the fiscal committee if the fees were to be changed. Vice-Chair Scott gave an overview of the statutory process. He noted the ongoing work that has to be done outside the application process that requires ongoing resources and the larger problem related to fees not covering the ongoing costs. Vice-Chair Scott noted the study committee that looked at funding for the Committee in the past. His recommendation was that the Committee communicate to the HB2 legislative committee the concerns about funding but not bring a request to the fiscal committee until the legislative committee studying the SEC completes its work. Commissioner Sheehan noted the overarching issue that there isn’t a filing fee associated with everything that comes before the body and that it was prudent to work with the legislative study committee regarding the issue. Vice-Chair Scott suggested that the Committee vote to provide a letter to the legislative

committee. Mr. Kassas suggested that the structure of the fees may need to change and questioned whether establishment of an ongoing maintenance fee might be useful. Vice-Chair Scott moved that the Committee send a letter to the legislative committee authored by the Chair and Vice-Chair. **Unanimous.**

5. Committee review and discussion of Antrim Wind Investigative Subcommittee actions, including correspondence from the Investigative Subcommittee in Docket 2021-02 dated May 24, 2021 regarding a May 6, 2021 complaint.

Discussion of the May 24, 2021 recommendation to the Committee from the Subcommittee recommending no action be taken in response to the Complaint. Attorney Lavalley summarized the options before the Committee. Mr. Arvelo moved that the Committee accept the recommendation of the Subcommittee. Ms. Duprey responded to ask whether the Committee members have seen the letter from Mr. Block which was just emailed. Ms. Duprey noted the letter asserted that the lights were still flashing more than they should. The Committee discussed the specifics of the complaint at issue in the May 6, 2021 complaint. Attorney Lavalley read the complaint to the Committee regarding the TransAlta plan to put the system into override for system optimization. Vice-Chair noted that the complaint at issue was narrow on the issue in the complaint and noted that should be reviewed by the subcommittee as a separate complaint. The Chair noted that the letter from Mr. Block is directed to Mr. Evans, the presiding officer of the subcommittee in docket 2021-02, not the Committee. Mr. Kassas indicated that he would be abstaining from the vote given his participation in the subcommittee. Vice-Chair indicated that the letter from Mr. Block should be handled by the subcommittee. He noted that the subcommittee gave the complaint a thorough review and said he was in favor of accepting the recommendation. Motion to approve the recommendation of the Subcommittee approved - **Unanimous** (Kassas abstained).

The meeting was adjourned to the call of the Chair.

SNOW STAR FARM

63 Loveren Mill Road, Antrim, New Hampshire 03440 | 603-588-2552 | snowstar@tds.net

July 20, 2021

Jonathan A. Evans
Presiding Officer
New Hampshire Site Evaluation Subcommittee
21 South Fruit Street, Suite 10
Concord, NH 03301

**RE: DOCKET NO. 2021-02 INVESTIGATION OF COMPLAINTS
REGARDING THE ANTRIM WIND ENERGY FACILITY**

Dear Subcommittee Chair Evans,

Thank you for the opportunity to submit these comments in the above referenced matter before the SEC prior to the public meeting of the full Site Evaluation Committee scheduled for July 21st, 2021.

I would like to direct the Subcommittee's attention to two documents submitted by TransAlta to Senior Assistant Attorney General Kelvin Brooks in reference to the operation of the Aircraft Detection Lighting System at the Antrim Wind facility. I am attaching these documents for reference.

By way of introduction, the Aircraft Detection Lighting System (ADLS) was installed at the Antrim facility to comply with the agreement that the night time lighting on the turbines would provide minimal impact on light pollution in the region. The prediction of the manufacturers of this equipment was that, based on the sparse levels of nearby night time air traffic, the flashing turbine lights would remain off approximately 99% of the time. This was to be accomplished by radar monitoring of air traffic, and, in the absence of any aircraft within an elongated dome-shaped area of 3 nautical miles radius and 1000 feet in altitude around and above the turbines, the flashing turbine warning lights would remain off. When properly operating, the lighting would be triggered on when an aircraft enters the active zone and remain on as long as that craft remains within the zone. If the ADLS is not able to track aircraft progress within the activation zone, then FAA regulations call for the lights to remain on for a duration of 30 minutes from the initial triggering.

Attorney Brooks requested that TransAlta supply a complete record of when the strobe lights were in operation and when they were not. Instead, what was provided was only cumulative summary data of percentage of times the lights were in operation. These summaries were provided in curious, obtuse forms. Close examination of the data presented yields some very curious figures.

The first document, titled "Antrim Wind – 2021 ADLS Data", is a very odd graph of dots which appear to represent percentages of time that the lights were on, during the period from January 1st, 2021 to the last part of June, 2021. Besides being extremely difficult to read and interpret, this graph raises several very troubling questions about the accuracy of TransAlta's data. For instance, why are there at the most only 20 data points for each month, regardless of the number of nights in the month? More troubling is the question of how TransAlta, during the period between March 2nd, 2021 and April 11th, 2021 was able to record the strobe lighting in operation from 100% to approximately 112% of the time at least a half dozen days. As a Professor of Communications, I would only be able to interpret this as an indicator of faulty data recording and/or incompetent data representation. Either way, it calls into question the accuracy of ALL data submitted by TransAlta.

The second submission, a chart titled "Antrim Wind – June 2021 ADLS Data", is a numerical table of, again, cumulative percentages of the times the lights were either activated or deactivated (obfuscatory chartspeak for "on" and "off"). Even if we are to take these figures at face value, it is obvious that the amount of time the lights were on far exceeds the promises made by the applicant and expected by the residents of Antrim.

TransAlta admitted that the ADLS was not functioning optimally during the first part of the year, resulting in the lighting being on most of the time every night. During a period in May, 2021, "upgrades" to the system were installed to bring it up to the predicted operation capabilities. However, a study of the cumulative percentage of "activated" times shown after the completion of said upgrades shows that the lights were still flashing an average of over 42% of the time every night, and over 60% of the time some nights. Never were the lights off more than 74% of the time, a far cry from the predicted and promised 99%.

If we parse the percentages of "activated" times using the FAA's regulations for amount of time the lights should trigger for each encounter, TransAlta's data suggests that, during the period from June 5th, 2021 to June 22nd, 2021, there were a total of 139 night time aircraft passages under 1000 feet in altitude over the turbines (for an average of almost 8 encounters per night). This is patently absurd for this very rural area, and, again, this brings into question the accuracy of ALL of TransAlta's data AND the ability of the ADLS to keep the strobe lighting off most of the time.

The residents of Antrim deserve to experience the conditions promised to them in the Certificate of Operation issued to Antrim Wind by the Site Evaluation Committee. That document is not only a contract between the developer and the State, but also a contract between both those entities and the people of Antrim. Failure to enforce the terms of the Certificate is de facto a breach of that contract and the residents of Antrim deserve satisfaction. I urge the Subcommittee to act to assure the observance of the terms of the Certificate.

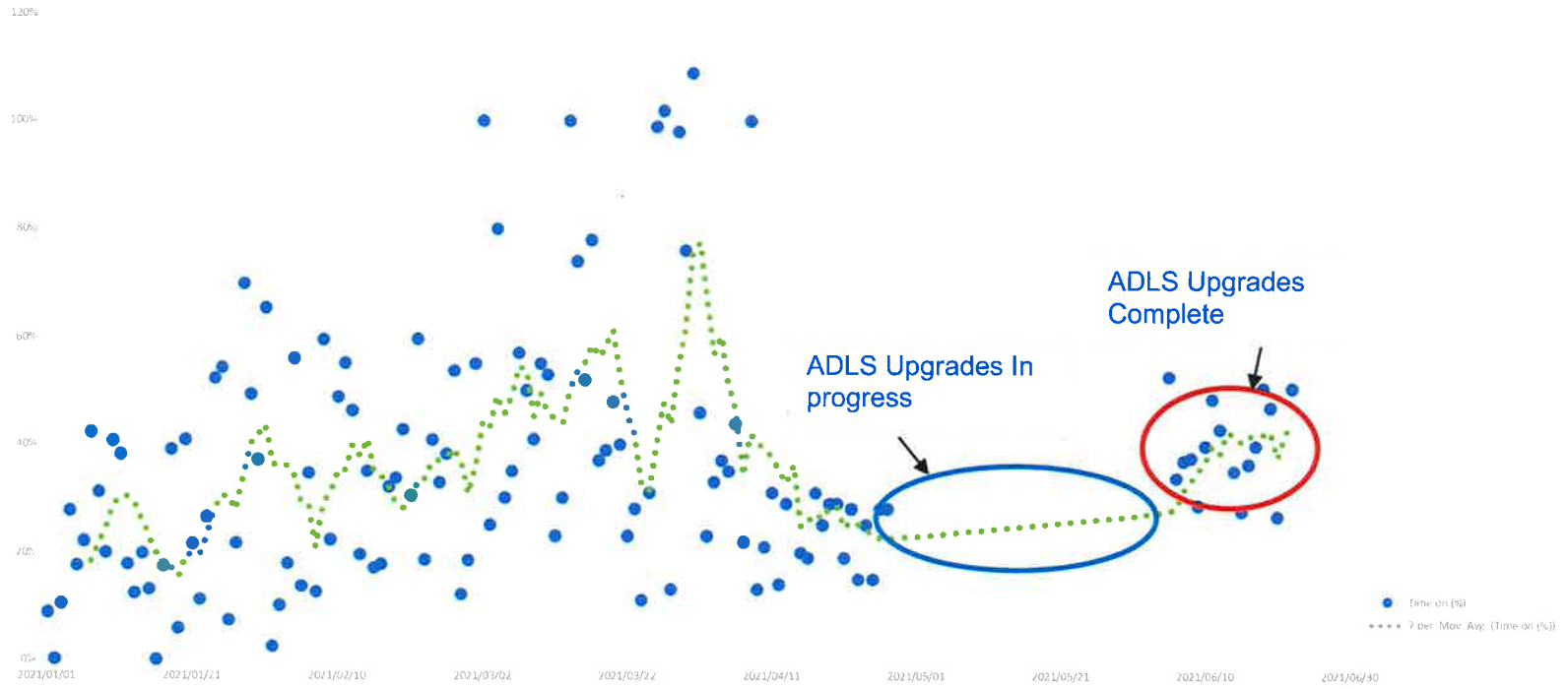
Sincerely,



Richard Block
SNOW STAR FARM

Antrim Wind – 2021 ADLS Data

ADLS - Time on (%) at night 2021



Antrim Wind – June 2021 ADLS Data

Period Beginning	Sunset (UTC)	Period Ending	Sunrise (UTC)	Duration of Night	Lights Activated Percentage	Lights Deactivated Percentage	Total %	Lights Activated Time	Lights Deactivated Time
2021/06/05 0:23	0:23:00	2021/06/05 9:10	9:10:00	8:47:00	52.67%	47.33%	100.00%	4:37:34	4:09:26
2021/06/06 0:24	0:24:00	2021/06/06 9:10	9:10:00	8:46:00	33.72%	66.28%	100.00%	2:57:22	5:48:38
2021/06/07 0:25	0:25:00	2021/06/07 9:10	9:10:00	8:45:00	36.91%	63.09%	100.00%	3:13:47	5:31:13
2021/06/08 0:26	0:26:00	2021/06/08 9:09	9:09:00	8:43:00	37.50%	62.50%	100.00%	3:16:07	5:26:52
2021/06/09 0:26	0:26:00	2021/06/09 9:09	9:09:00	8:43:00	28.64%	71.36%	100.00%	2:29:47	6:13:13
2021/06/10 0:27	0:27:00	2021/06/10 9:09	9:09:00	8:42:00	39.78%	60.22%	100.00%	3:27:39	5:14:21
2021/06/11 0:27	0:27:00	2021/06/11 9:09	9:09:00	8:42:00	48.51%	51.49%	100.00%	4:13:13	4:28:47
2021/06/12 0:28	0:28:00	2021/06/12 9:09	9:09:00	8:41:00	42.93%	57.07%	100.00%	3:43:40	4:57:20
2021/06/13 0:28	0:28:00	2021/06/13 9:09	9:09:00	8:41:00	61.44%	38.56%	100.00%	5:20:06	3:20:54
2021/06/14 0:29	0:29:00	2021/06/14 9:08	9:08:00	8:39:00	35.05%	64.95%	100.00%	3:01:55	5:37:05
2021/06/15 0:29	0:29:00	2021/06/15 9:08	9:08:00	8:39:00	27.49%	72.51%	100.00%	2:22:40	6:16:20
2021/06/16 0:30	0:30:00	2021/06/16 9:08	9:08:00	8:38:00	36.32%	63.68%	100.00%	3:08:08	5:29:52
2021/06/17 0:30	0:30:00	2021/06/17 9:08	9:08:00	8:38:00	39.75%	60.25%	100.00%	3:25:54	5:12:06
2021/06/18 0:30	0:30:00	2021/06/18 9:09	9:09:00	8:39:00	50.52%	49.48%	100.00%	4:22:12	4:16:48
2021/06/19 0:31	0:31:00	2021/06/19 9:09	9:09:00	8:38:00	46.92%	53.08%	100.00%	4:03:03	4:34:57
2021/06/20 0:31	0:31:00	2021/06/20 9:09	9:09:00	8:38:00	26.55%	73.45%	100.00%	2:17:32	6:20:28
2021/06/21 0:31	0:31:00	2021/06/21 9:09	9:09:00	8:38:00	62.39%	37.61%	100.00%	5:23:11	3:14:49
2021/06/22 0:32	0:32:00	2021/06/22 9:09	9:09:00	8:37:00	50.48%	49.52%	100.00%	4:20:59	4:16:01

Average	42.09%	57.91%	-	03:39:09	05:01:37
Median	39.77%	60.24%	-	03:26:47	05:13:14
Min.	26.55%	37.61%	-	02:17:32	03:14:49
Max.	62.39%	73.45%	-	05:23:11	06:20:28



TransAlta Corporation

Box 1900, Station "M"
110 - 12th Avenue SW
Calgary, Alberta
T2P 2M1

T (403) 267-7110

www.transalta.com

Gavin MacPhee

Specialist, Environment – Wind and Solar Operations

Direct Line: 780-887-0276

Email: gavin_macphee@transalta.com

August 27, 2021

Jonathan Evans, Chair
New Hampshire Site Evaluation Committee
21 South Fruit Street, Suite 10
Concord, NH
03301

Dear Mr. Evans:

RE: Docket No. 2021-02 - Antrim Wind Energy - Aviation Detection Lighting System (ADLS) Activity June & July, 2021

For your consideration; TransAlta has compiled a list of daily Antrim ADLS activity for the months of June and July, 2021.

Due to the Antrim ALDS system upgrade process as well as a vendor error involving colour coding of light activities; bar graphs generated for the dates of June 1 – 4, 6 – 7, 9, 19, and 23 – 24 did not accurately reflect the ADLS operational state. However, in order to ensure transparency with residents and stakeholders, if there are any questions related to specific times that the lights were on or off during the nights where bar graphs were not included, TransAlta would be happy to provide that information

We hope this information helps to clarify the recent activity and appreciate your patience as we work with our vendor to optimize the Antrim ADLS. If you have any further questions, please feel free to email myself and I will respond as quickly as possible.

Yours truly,

TRANSALTA CORPORATION

A handwritten signature in black ink, appearing to read "Gavin MacPhee".

Gavin MacPhee
Specialist, Environmental – Wind and Solar Operations



TransAlta Corporation

Box 1900, Station "M"
110 - 12th Avenue SW
Calgary, Alberta
T2P 2M1

T (403) 267-7110
www.transalta.com

**Antrim Wind Energy – Aviation Detection Lighting System (ADLS) Daily Summary
June & July, 2021**



Full daily report

Daily report created at

2021/06/05 15:59:56 UTC


Current status

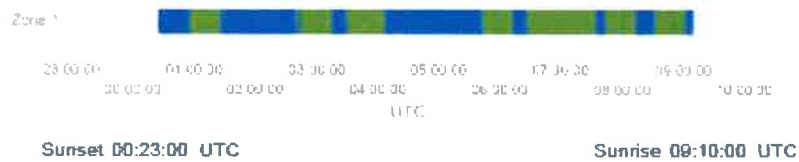
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:23:00
Sunrise 09:10:00

Timeframe

From: 2021/06/04 16:00:10 UTC
To: 2021/06/05 15:59:44 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/08 11:07:00 UTC



Current status

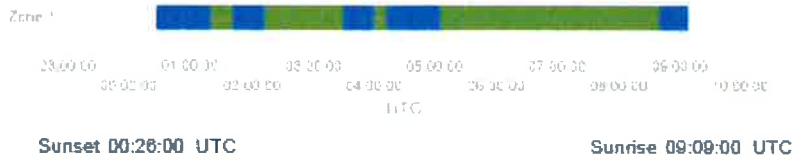
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:26:00
Sunrise 09:09:00

Timeframe

From: 2021/06/07 16:00:11 UTC
To: 2021/06/08 09:10:18 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/10 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005507
Sunset 00:27:00
Sunrise 09:09:00

Timeframe

From: 2021/06/09 16:00:11 UTC
To: 2021/06/10 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:27:00 UTC

Sunrise 09:09:00 UTC



Full daily report

Daily report created at

2021/06/11 15:59:55 UTC



Current status

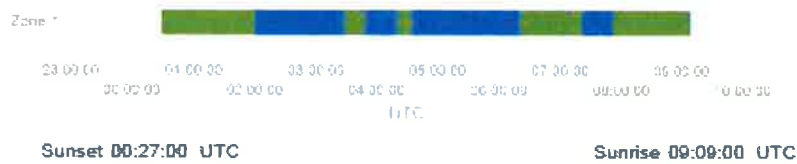
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:27:00
Sunrise 09:09:00

Timeframe

From: 2021/06/10 16:00:11 UTC
To: 2021/06/11 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/12 15:59:55 UTC

Current status

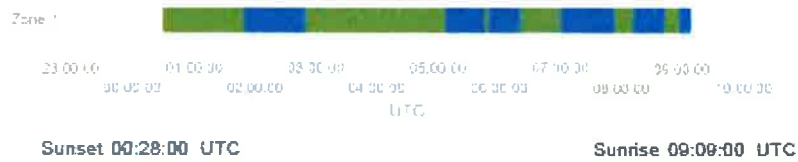
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:28:00
Sunrise 09:09:00

Timeframe

From: 2021/06/11 16:00:11 UTC
To: 2021/06/12 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/13 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:28:00
Sunrise 09:09:00

Timeframe

From: 2021/06/12 16:00:11 UTC
To: 2021/06/13 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/14 15:59:56 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:29:00
Sunrise 09:08:00

Timeframe

From: 2021/06/13 16:00:11 UTC
To: 2021/06/14 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:29:00 UTC

Sunrise 09:08:00 UTC



Full daily report

Daily report created at

2021/06/15 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:29:00
Sunrise 09:08:00

Timeframe

From: 2021/06/14 16:00:11 UTC
To: 2021/06/15 15:59:48 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:29:00 UTC

Sunrise 09:08:00 UTC



Full daily report

Daily report created at

2021/06/16 15:59:55 UTC



Current status

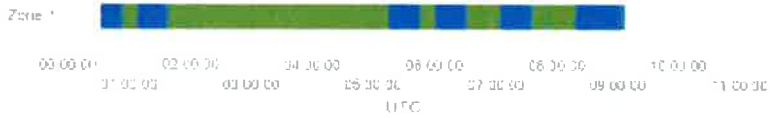
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:30:00
Sunrise 09:08:00

Timeframe

From: 2021/06/15 16:00:11 UTC
To: 2021/06/16 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:30:00 UTC

Sunrise 09:08:00 UTC



Full daily report

Daily report created at

2021/06/17 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:30:00
Sunrise 09:08:00

Timeframe

From: 2021/06/16 16:00:11 UTC
To: 2021/06/17 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/18 15:59:55 UTC

Current status

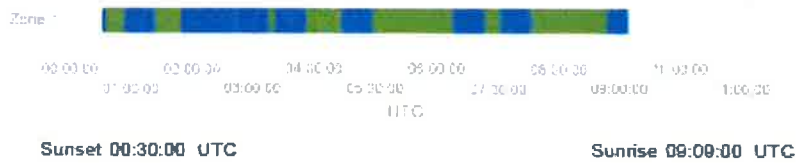
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005507
Sunset 00:30:00
Sunrise 09:09:00

Timeframe

From: 2021/06/17 16:00:11 UTC
To: 2021/06/18 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/20 15:59:55 UTC


Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:31:00
Sunrise 09:09:00

Timeframe

From: 2021/06/19 16:00:11 UTC
To: 2021/06/20 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/21 15:59:56 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:31:00
Sunrise 09:09:00

Timeframe

From: 2021/06/20 16:00:11 UTC
To: 2021/06/21 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:31:00 UTC

Sunrise 09:09:00 UTC



Full daily report

Daily report created at

2021/06/22 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:09:00

Timeframe

From: 2021/06/21 16:00:11 UTC
To: 2021/06/22 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/25 15:59:57 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:10:00

Timeframe

From: 2021/06/24 16:00:11 UTC
To: 2021/06/25 15:59:45 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:32:00 UTC

Sunrise 09:10:00 UTC



Full daily report

Daily report created at

2021/06/26 15:59:56 UTC

Current status

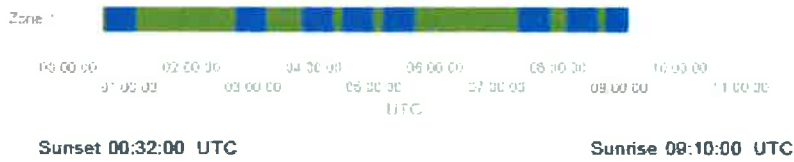
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:10:00

Timeframe

From: 2021/06/25 17:39:13 UTC
To: 2021/06/26 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/27 15:59:55 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 08:11:00

Timeframe

From: 2021/06/26 16:00:10 UTC
To: 2021/06/27 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:32:00 UTC

Sunrise 08:11:00 UTC



Full daily report

Daily report created at

2021/06/28 15:59:55 UTC



Current status

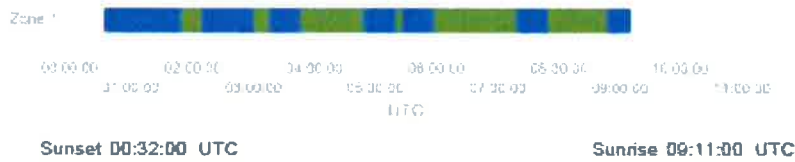
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:11:00

Timeframe

From: 2021/06/27 16:00:10 UTC
To: 2021/06/28 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



TERMA[®] Full daily report

Daily report created at **2021/06/29 15:59:55 UTC**


Current status

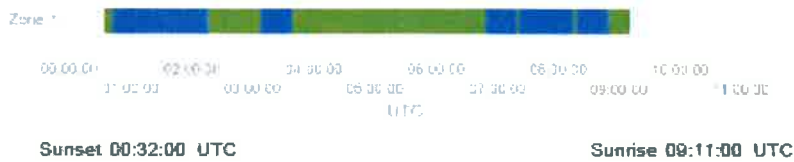
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:11:00

Timeframe

From: 2021/06/28 16:00:10 UTC
To: 2021/06/29 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/06/30 15:59:56 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005507
Sunset 00:32:00
Sunrise 09:12:00

Timeframe

From: 2021/06/29 16:00:10 UTC
To: 2021/06/30 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:32:00 UTC

Sunrise 09:12:00 UTC



Full daily report

Daily report created at

2021/07/01 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:12:00

Timeframe

From: 2021/06/30 16:00:10 UTC
To: 2021/07/01 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:32:00 UTC

Sunrise 09:12:00 UTC



Full daily report

Daily report created at

2021/07/02 15:59:55 UTC

Current status

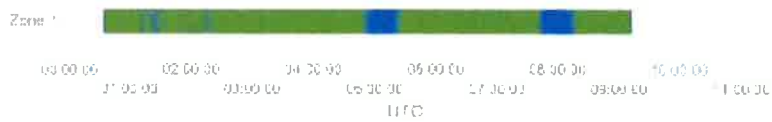
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:13:00

Timeframe

From: 2021/07/01 16:00:10 UTC
To: 2021/07/02 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:32:00 UTC

Sunrise 09:13:00 UTC



Full daily report

Daily report created at

2021/07/03 15:59:56 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:13:00

Timeframe

From: 2021/07/02 16:00:10 UTC
To: 2021/07/03 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:32:00 UTC

Sunrise 09:13:00 UTC



Full daily report

Daily report created at

2021/07/04 15:59:55 UTC



Current status

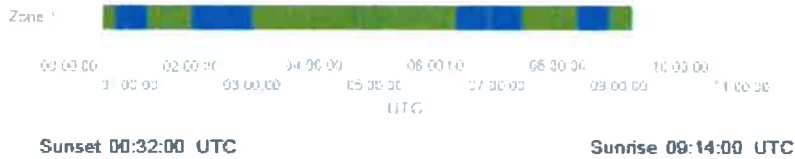
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:32:00
Sunrise 09:14:00

Timeframe

From: 2021/07/03 16:00:10 UTC
To: 2021/07/04 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/05 15:59:56 UTC

Current status

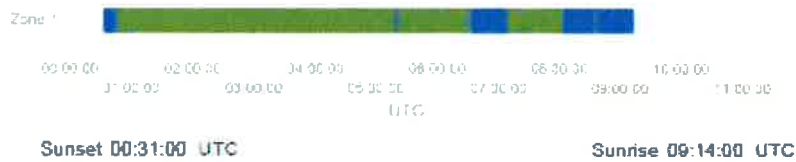
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:31:00
Sunrise 09:14:00

Timeframe

From: 2021/07/04 16:00:10 UTC
To: 2021/07/05 15:59:40 UTC

Light control

- Lights deactivated
- Lights activated





Full daily report

Daily report created at

2021/07/06 15:59:55 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:31:00
Sunrise 09:15:00

Timeframe

From: 2021/07/05 16:00:10 UTC
To: 2021/07/06 15:59:40 UTC

Light control

-  Lights deactivated
-  Lights activated



Sunset 00:31:00 UTC

Sunrise 09:15:00 UTC



Full daily report

Daily report created at

2021/07/07 15:59:56 UTC

Current status

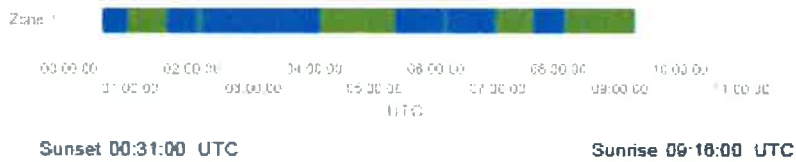
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:31:00
Sunrise 09:16:00

Timeframe

From: 2021/07/06 16:00:10 UTC
To: 2021/07/07 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/08 15:59:55 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005507
Sunset 00:30:00
Sunrise 09:10:00

Timeframe

From: 2021/07/07 16:00:10 UTC
To: 2021/07/08 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:30:00 UTC

Sunrise 09:10:00 UTC



Full daily report

Daily report created at

2021/07/09 15:59:56 UTC

Current status

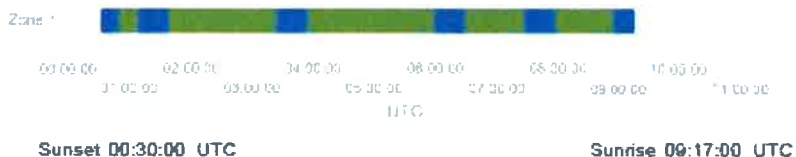
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:30:00
Sunrise 09:17:00

Timeframe

From: 2021/07/08 16:00:10 UTC
To: 2021/07/09 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/10 15:59:55 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:30:00
Sunrise 09:18:00

Timeframe

From: 2021/07/09 16:00:10 UTC
To: 2021/07/10 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:30:00 UTC

Sunrise 09:18:00 UTC



Full daily report

Daily report created at

2021/07/11 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:29:00
Sunrise 09:18:00

Timeframe

From: 2021/07/10 16:00:10 UTC
To: 2021/07/11 15:59:40 UTC

Light control

- Lights deactivated
- Lights activated





Full daily report

Daily report created at

2021/07/12 15:59:55 UTC



Current status

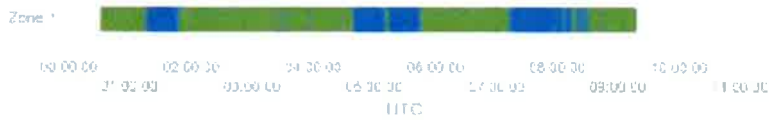
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:29:00
Sunrise 09:19:00

Timeframe

From: 2021/07/11 16:00:10 UTC
To: 2021/07/12 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:29:00 UTC

Sunrise 09:19:00 UTC



Full daily report

Daily report created at

2021/07/13 15:59:55 UTC

Current status

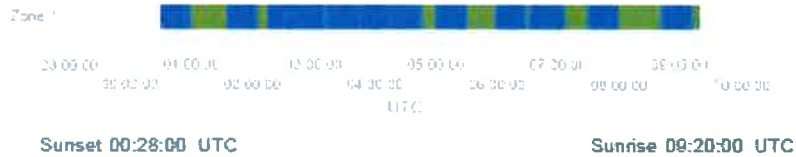
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:28:00
Sunrise 09:20:00

Timeframe

From: 2021/07/12 16:00:10 UTC
To: 2021/07/13 15:59:40 UTC

Light control

- Lights deactivated
- Lights activated





Full daily report

Daily report created at

2021/07/14 15:59:55 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:28:00
Sunrise 09:21:00

Timeframe

From: 2021/07/13 16:00:10 UTC
To: 2021/07/14 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:28:00 UTC

Sunrise 09:21:00 UTC



Full daily report

Daily report created at

2021/07/15 15:59:55 UTC



Current status

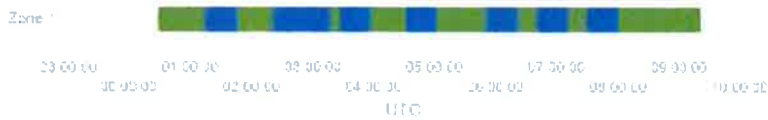
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:27:00
Sunrise 09:22:00

Timeframe

From: 2021/07/14 16:00:10 UTC
To: 2021/07/15 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:27:00 UTC

Sunrise 09:22:00 UTC



Full daily report

Daily report created at

2021/07/16 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:28:00
Sunrise 09:22:00

Timeframe

From: 2021/07/15 16:00:10 UTC
To: 2021/07/16 15:59:40 UTC

Light control

- Lights deactivated
- Lights activated



Sunset 00:28:00 UTC

Sunrise 09:22:00 UTC



Full daily report

Daily report created at

2021/07/17 15:59:55 UTC

Current status

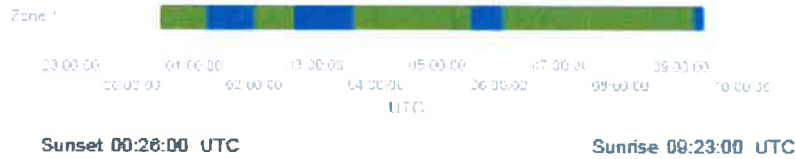
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:26:00
Sunrise 09:23:00

Timeframe

From: 2021/07/16 16:00:10 UTC
To: 2021/07/17 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/18 15:59:56 UTC

Current status

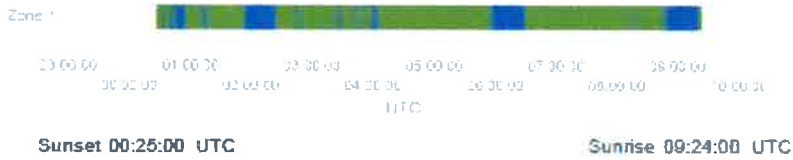
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005507
Sunset 00:25:00
Sunrise 09:24:00

Timeframe

From: 2021/07/17 16:00:10 UTC
To: 2021/07/18 15:59:40 UTC

Light control

-  Lights deactivated
-  Lights activated





Full daily report

Daily report created at

2021/07/19 15:59:55 UTC



Current status

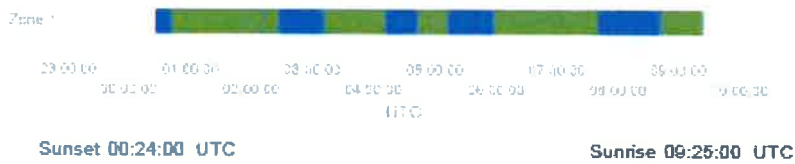
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:24:00
Sunrise 09:25:00

Timeframe

From: 2021/07/18 16:00:10 UTC
To: 2021/07/19 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/20 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:24:00
Sunrise 09:26:00

Timeframe

From: 2021/07/19 16:00:10 UTC
To: 2021/07/20 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:24:00 UTC

Sunrise 09:26:00 UTC



Full daily report

Daily report created at

2021/07/21 15:59:56 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:23:00
Sunrise 09:27:00

Timeframe

From: 2021/07/20 16:00:10 UTC
To: 2021/07/21 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:23:00 UTC

Sunrise 09:27:00 UTC



Full daily report

Daily report created at

2021/07/22 15:59:56 UTC

Current status

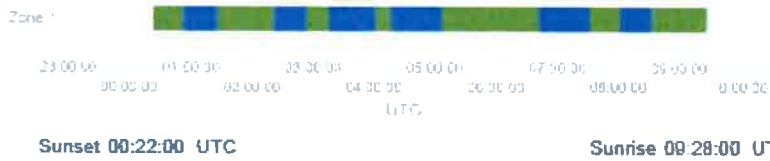
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:22:00
Sunrise 09:28:00

Timeframe

From: 2021/07/21 16:00:10 UTC
To: 2021/07/22 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/24 15:59:56 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:20:00
Sunrise 09:30:00

Timeframe

From: 2021/07/23 16:00:10 UTC
To: 2021/07/24 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:20:00 UTC

Sunrise 09:30:00 UTC



Full daily report

Daily report created at

2021/07/25 15:59:56 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:19:00
Sunrise 09:31:00

Timeframe

From: 2021/07/24 16:00:10 UTC
To: 2021/07/25 15:59:40 UTC

Light control

-  Lights deactivated
-  Lights activated



Sunset 00:19:00 UTC

Sunrise 09:31:00 UTC



Full daily report

Daily report created at

2021/07/26 15:59:55 UTC



Current status

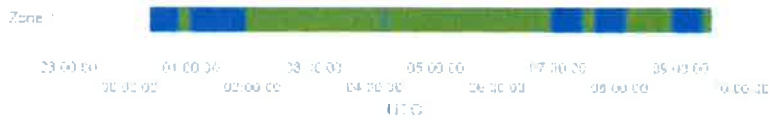
Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:18:00
Sunrise 09:32:00

Timeframe

From: 2021/07/25 16:00:10 UTC
To: 2021/07/26 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:18:00 UTC

Sunrise 09:32:00 UTC



Full daily report

Daily report created at

2021/07/27 15:59:55 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:17:00
Sunrise 09:33:00

Timeframe

From: 2021/07/26 16:00:10 UTC
To: 2021/07/27 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:17:00 UTC

Sunrise 09:33:00 UTC

TERMATM

Full daily report

Daily report created at

2021/07/28 15:59:55 UTC

Current status

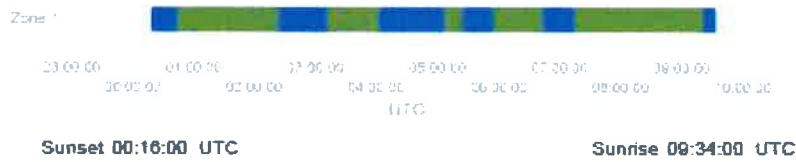
Locality	Antrim
Day / Night	Day
Mode	Auto
Latitude	43.074417
Longitude	-72.005597
Sunset	00:16:00
Sunrise	09:34:00

Timeframe

From:	2021/07/27 16:00:10 UTC
To:	2021/07/28 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/29 15:59:55 UTC



Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:15:00
Sunrise 09:35:00

Timeframe

From: 2021/07/28 16:00:10 UTC
To: 2021/07/29 15:59:40 UTC

Light control

 Lights deactivated
 Lights activated



Sunset 00:15:00 UTC

Sunrise 09:35:00 UTC



Full daily report

Daily report created at

2021/07/30 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:14:00
Sunrise 09:36:00

Timeframe

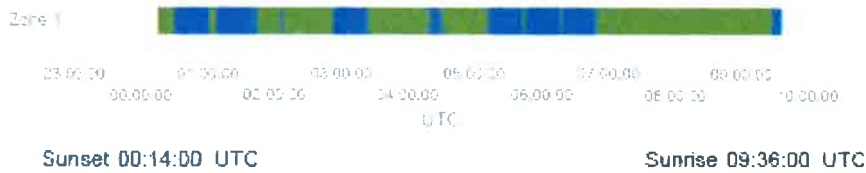
From: 2021/07/29 16:00:10 UTC
To: 2021/07/30 15:59:40 UTC



Full daily report

Light control

 Lights deactivated
 Lights activated





Full daily report

Daily report created at

2021/07/31 15:59:55 UTC

Current status

Locality Antrim
Day / Night Day
Mode Auto
Latitude 43.074417
Longitude -72.005597
Sunset 00:13:00
Sunrise 09:37:00



Timeframe

From: 2021/07/30 16:00:10 UTC
To: 2021/07/31 15:59:40 UTC



Full daily report

Light control

 Lights deactivated
 Lights activated





TransAlta Corporation

Box 1900, Station "M"
110 - 12th Avenue SW
Calgary, Alberta
T2P 2M1

T (403) 267-7110
www.transalta.com

**Antrim Wind Energy – Aviation Detection Lighting System (ADLS) Activity
June & July, 2021**

ATTACHMENT F

Period Beginning	Sunset (UTC)	Period Ending	Sunrise (UTC)	Duration of Night	Lights Activated Percentage	Lights Deactivated Percentage	Total %	Lights Activated Time	Lights Deactivated Time
06/05/2021 0:23	0:23:00	06/05/2021 9:10	9:10:00	8:47:00	52.67%	47.33%	100.00%	4:37:34	4:09:26
06/06/2021 0:24	0:24:00	06/06/2021 9:10	9:10:00	8:46:00	33.72%	66.28%	100.00%	2:57:22	5:48:38
06/07/2021 0:25	0:25:00	06/07/2021 9:10	9:10:00	8:45:00	36.91%	63.09%	100.00%	3:13:47	5:31:13
06/08/2021 0:26	0:26:00	06/08/2021 9:09	9:09:00	8:43:00	37.50%	62.50%	100.00%	3:16:07	5:36:52
06/09/2021 0:26	0:26:00	06/09/2021 9:09	9:09:00	8:43:00	28.64%	71.36%	100.00%	2:29:47	6:13:13
06/10/2021 0:27	0:27:00	06/10/2021 9:09	9:09:00	8:42:00	39.78%	60.22%	100.00%	3:27:39	5:14:21
06/11/2021 0:27	0:27:00	06/11/2021 9:09	9:09:00	8:42:00	48.51%	51.49%	100.00%	4:13:13	4:28:47
06/12/2021 0:28	0:28:00	06/12/2021 9:09	9:09:00	8:41:00	42.93%	57.07%	100.00%	3:43:40	4:57:20
06/13/2021 0:28	0:28:00	06/13/2021 9:09	9:09:00	8:41:00	61.44%	38.56%	100.00%	5:20:06	3:20:54
06/14/2021 0:29	0:29:00	06/14/2021 9:08	9:08:00	8:39:00	35.05%	64.95%	100.00%	3:01:55	5:37:05
06/15/2021 0:29	0:29:00	06/15/2021 9:08	9:08:00	8:39:00	27.49%	72.51%	100.00%	2:22:40	6:16:20
06/16/2021 0:30	0:30:00	06/16/2021 9:08	9:08:00	8:38:00	36.32%	63.68%	100.00%	3:08:08	5:29:52
06/17/2021 0:30	0:30:00	06/17/2021 9:08	9:08:00	8:38:00	39.75%	60.25%	100.00%	3:25:54	5:12:06
06/18/2021 0:30	0:30:00	06/18/2021 9:09	9:09:00	8:39:00	50.52%	49.48%	100.00%	4:22:12	4:16:48
06/19/2021 0:31	0:31:00	06/19/2021 9:09	9:09:00	8:38:00	46.92%	53.08%	100.00%	4:03:03	4:34:57
06/20/2021 0:31	0:31:00	06/20/2021 9:09	9:09:00	8:38:00	26.55%	73.45%	100.00%	2:17:32	6:20:28
06/21/2021 0:31	0:31:00	06/21/2021 9:09	9:09:00	8:38:00	62.39%	37.61%	100.00%	5:23:11	3:14:49
06/22/2021 0:32	0:32:00	06/22/2021 9:09	9:09:00	8:37:00	50.48%	49.52%	100.00%	4:20:59	4:16:01
06/23/2021 0:32	0:32:00	06/23/2021 9:09	9:09:00	8:37:00	61.32%	38.68%	100.00%	5:17:01	3:19:59
06/24/2021 0:32	0:32:00	06/24/2021 9:10	9:10:00	8:38:00	56.29%	43.71%	100.00%	4:51:35	3:46:25
06/25/2021 0:32	0:32:00	06/25/2021 9:10	9:10:00	8:38:00	43.14%	56.86%	100.00%	3:43:28	4:54:32
06/26/2021 0:32	0:32:00	06/26/2021 9:10	9:10:00	8:38:00	45.39%	54.61%	100.00%	3:55:07	4:42:53
06/27/2021 0:32	0:32:00	06/27/2021 9:11	9:11:00	8:39:00	38.35%	61.65%	100.00%	3:19:02	5:19:58
06/28/2021 0:32	0:32:00	06/28/2021 9:11	9:11:00	8:39:00	52.07%	47.93%	100.00%	4:30:15	4:08:45
06/29/2021 0:32	0:32:00	06/29/2021 9:11	9:11:00	8:39:00	45.80%	54.20%	100.00%	3:57:42	4:41:18
06/30/2021 0:32	0:32:00	06/30/2021 9:12	9:12:00	8:40:00	47.26%	52.74%	100.00%	4:05:45	4:34:15
07/01/2021 0:32	0:32:00								
				Average	44.12%	55.81%		03:49:25	04:50:40
				Median	44.27%	55.74%		03:49:24	04:48:42
				Min	26.55%	37.61%		02:17:32	03:14:49
				Max	62.39%	73.45%		05:23:11	06:20:28

