

CHAPTER 14. AIRCRAFT DETECTION LIGHTING SYSTEMS

14.1 Purpose.

Aircraft Detection Lighting Systems (ADLS) are sensor-based systems designed to detect aircraft as they approach an obstruction or group of obstructions; these systems automatically activate the appropriate obstruction lights until they are no longer needed by the aircraft. This technology reduces the impact of nighttime lighting on nearby communities and migratory birds and extends the life expectancy of obstruction lights.

14.2 General Standards.

14.2.1 The system should be designed with sufficient sensors to provide complete detection coverage for aircraft that enter a three-dimensional volume of airspace, or coverage area, around the obstruction(s) (see Figure A-27 in Appendix A), as follows:

1. Horizontal detection coverage should provide for obstruction lighting to be activated and illuminated prior to aircraft penetrating the perimeter of the volume, which is a minimum of 3 NM (5.5 km) away from the obstruction or the perimeter of a group of obstructions.
2. Vertical detection coverage should provide for obstruction lighting to be activated and illuminated prior to aircraft penetrating the volume, which extends from the ground up to 1,000 feet (304 m) above the highest part of the obstruction or group of obstructions, for all areas within the 3 NM (5.5 km) perimeter defined in subparagraph 14.2.1 1 above.
3. In some circumstances, it may not be possible to meet the volume area defined above because the terrain may mask the detection signal from acquiring an aircraft target within the 3 NM (5.5 km) perimeter. In these cases, the sponsor should identify these areas in their application to the FAA for further evaluation.
4. In some situations, lighting not controlled by the ADLS may be required when the 3 NM (5.5 km) perimeter is not achievable to ensure pilots have sufficient warning before approaching the obstructions.

14.2.2 The ADLS should activate the obstruction lighting system in sufficient time to allow the lights to illuminate and synchronize to flash simultaneously prior to an aircraft penetrating the volume defined above. The lights should remain on for a specific time period, as follows:

1. For ADLSs capable of continuously monitoring aircraft while they are within the 3 NM/1,000 foot (5.5 km/304 m) volume, the obstruction lights should stay on until the aircraft exits the volume. 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. This should provide the untracked aircraft sufficient time to exit the area and give the ADLS time to reset.

2. For ADLSs without the capability of monitoring aircraft targets in the 3 nm/1,000 foot (5.5 km/304 m) volume, the obstruction lights should stay on for a preset amount of time, calculated as follows:
 - a. For single obstructions: 7 minutes.
 - b. For groups of obstructions: (the widest dimension in nautical miles + 6) x 90 seconds equals the number of seconds the light(s) should remain on.
- 14.2.3 Acceptance of ADLS applications will be on a case-by-case basis and may be modified, adjusted, or denied based on proximity of the obstruction or group of obstructions to airports, low-altitude flight routes, military training areas, or other areas of frequent flight activity. It may be appropriate to keep certain obstructions closest to these known activity areas illuminated during the nighttime hours, while the remainder of the group's obstruction lighting is controlled by the ADLS.
- 14.2.4 Project sponsors requesting ADLS use should include in their application maps or diagrams indicating the location of the proposed sensors, the range of each sensor, and a visual indication showing how each sensor's detection arc provides the full horizontal and vertical coverage, as required under paragraph 14.2.1. In the event that detection coverage is not 100 percent due to terrain masking, project sponsors should provide multiple maps or diagrams that indicate coverage at the affected altitudes. A sample diagram is shown in Figure A-27 in Appendix A.
- 14.2.5 Types of ADLS Component or System Failure Events.
 1. In the event of an ADLS component or system failure, the ADLS should automatically turn on all the obstruction lighting and operate in accordance with this AC as if it was not controlled by an ADLS. The obstruction lighting must remain in this state until the ADLS and its components are restored.
 2. In the event that an ADLS component failure occurs and an individual obstruction light cannot be controlled by the ADLS, but the rest of the ADLS is functional, that particular obstruction light should automatically turn on and operate in accordance with this AC as if it was not controlled by an ADLS, and the remaining obstruction lights can continue to be controlled by the ADLS. The obstruction lighting will remain in this state until the ADLS and its components are restored.
 3. Complete light failure should be addressed in accordance with Chapter 2 paragraph 2.4.
- 14.2.6 The ADLS's communication and operational status shall be checked at least once every 24 hours to ensure both are operational.
- 14.2.7 The ADLS should be able to detect an aircraft with a cross-sectional area of 1 square meter or more within the volume, as required in subparagraphs 14.2.1 1 and 14.2.1 2.
- 14.2.8 Each ADLS installation should maintain a log of activity data for a period of no less than the previous 15 days. This data should include, but not be limited to, the date, time, duration of all system activations/deactivations, track of aircraft activity,

PARTIAL TRANSCRIPT: SEC Subcommittee Public Meeting August 18, 2021

Discussion regarding ADLS System

(Time mark: 16:31: <https://mm.nh.gov/media/nhsec/2021-02-2021-08-18-subcommittee-meeting-recording-part-2.mp3>)

Chair Evans: The other thing I guess is address as attorney brooks mentioned that the lighting I don't know if there's something that would benefit us to discuss now since we're in a meeting regarding the lighting. It's ...

Duclos: this is a question of Attorney Needleman. Has the final report on the updates to the ADLS system been finalized?

Turner: Would you mind [] microphone please and tell who you are for the record

Getz: good afternoon I'm Tom Getz I'm an attorney for McLane Middleton representing Antrim wind . So with respect to the ADLS issues the report by Terma the manufacturer is not complete yet. They have been for the last for June and July compiling the raw data that Mister Brooks talked about in terms of when the lights are on and off and I know you have the letter from um, from um ...Mr. (laughter)

Chair: Yes I know which one you're talking about

Getz: You have a letter in the record about the ADLS and that the lights uh, the complaint about the amount of time the lights are on so we've provided some of the raw data just yesterday to Mr. brooks and I believe a copy was sent by Transalta, I think, to the town and to Chairwoman Martin. we can make sure that gets to the subcommittee and that someone will, anyways, through the chairwoman, but the full report by Terma is not it's not complete and I don't have a date when that would be made available.

Duclos: OK. Given the raw data was there seen an improvement or status quo type of thing?

Getz: the way that it's been characterized to me by the experts for Transalta is you have less variation and the time, at the time when the lights are on and off but the data for June and July still shows that the lights are on between 40 and 50% of the time. Now whether there's the background to show exactly when there were aircraft in that would have triggered that or whether you know the lights are still being triggered by other causes that I don't have the answer to

Turner?: is it possible for you guys to compile that information and forward it along so you can look at the amount of time that the lights are on and whether there's actually aircraft there?

Getz: we can show you the time where the lights are on and off and how much percentage wise over the night and there's a bar graph that's been developed that can tell you when it's on and off but when it is triggered by aircraft and or other reasons, I don't know the answer to that. But, you know, presumably when the Terma report is available it'll have a better handle on that than I do

Duclos: you said 40 to 45% of the time they're on still?

Getz: Yes.

Duclos: OK but this seems a higher number than I think the SEC was looking for in the review of the lights being off far more than on, that the ADLS system was going to ensure that that was going to happen so that's that's still identified as a problem with the ADLS system in my mind. But there isn't a standard per se in the certificate looking at 5 percent 3% or only when air traffic is in the facility or problems in the system which requires the lights to be on full time for health and safety reasons so

Getz: In the underlying proceeding, I think the focus was on a proposal to install an ADLS system as soon as it was approved by the FAA. I'm not aware that it actually went beyond any inquiry into what the numbers would or should be for that area but that's just that when an ADLS system was available that would be installed and of course the company working with this manufacturer is, and then the whole point of the period that was before you before in May was to perform the upgrades to try to get the system working and you know the most efficient way that it can. So I hope to have a direct answer on when that report will be available as soon as possible

Chair: OK. Thank you for the update.

2021	Average %		Medium %		Min %		Max %	
Month	Lights Activated	Lights Deactivated	Lights Activated	Lights Deactivated	Lights Activated	Lights Deactivated	Lights Activated	Lights Deactivated
Jun	47.33	56.43	44.27	56.97	26.55	37.61	100	73.45
Jun	35.78	64.22	36.23	63.77	14.12	32.37	67.63	85.88
Aug	43.98	56.02	43.06	56.95	19.68	27.53	72.47	80.32
Sep	71.26	28.74	62.51	37.49	14.04	-	100.00	85.96
Oct	31.3	68.7	31.71	68.29	4.87	0	100	95.13
Nov	26.39	73.61	27.29	72.71	7.02	55.23	44.77	92.98
Dec	20.32	79.68	18.51	81.49	6.57	57.76	42.24	93.43

Source: AWE 2022-01_attachments_i-q.pdf

Notes

Sep: Lights on 100% for 13 of the nights

Nov: Leaf off; 15 nights more than the average

Dec: Leaf off; 11 nights more than the average

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STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

September 23, 2016 - 12:50 P.M. **DAY 5**
Public Utilities Commission.
21 South Fruit Street, Suite 10 **Afternoon Session**
Concord, New Hampshire **ONLY**

IN RE: SEC DOCKET NO. 2015-02.
ANTRIM WIND ENERGY, LLC;
Application of Antrim Wind
Energy, LLC for a Certificate
of Site and Facility.
(Hearing on the merits)

PRESENT FOR
SUBCOMMITTEE: **SITE EVALUATION COMMITTEE:**

Cmsr. Robert R. Scott	Public Utilities Commission
<i>(Presiding as Presiding Officer)</i>	
Cmsr. Jeffery Rose	Dept. of Resources & Economic Development
Dr. Richard Boisvert	Dept. of Cultural Resources/ Div. of Historical Resources
(Designee)	
John S. Clifford	Public Utilities Commission
(Designee)	
Dir. Eugene Forbes	Dept. of Environmental Services/Water Division
(Designee)	
Patricia Weathersby	Public Member

Also Present for the SEC:

Michael J. Iacopino, Esq. (Brennan...
Pamela G. Monroe, SEC Administrator
Marissa Schuetz, SEC Program Specialist

COURT REPORTER: Cynthia Foster, LCR No. 014

1 MR. NEEDLEMAN: I think, Jason, he's
2 testified that he used it interchangeably. He's
3 referenced it in his report. He certainly used
4 it interchangeably in his testimony on this
5 exact issue so I think he's made his point.

6 MR. REIMERS: Okay. I'll move on.

7 Q Another question about the rules. This is one
8 that I started to ask earlier but wanted to make
9 sure I was looking at the right section. 301.05
10 (b) (10). It has, no, I'm sorry. (b) (9). Has
11 to do with lighting.

12 A Yes.

13 Q And it says, if the proposed facility is
14 required by Federal Aviation Administration
15 regulations to install aircraft warning lighting
16 or if the proposed facility would include other
17 nighttime lighting, a description and
18 characterization of the potential visual impacts
19 of this lighting, including the number of lights
20 visible and their distance from key observation
21 points, where in your report is the description
22 and characterization of the potential visual
23 impacts of the lighting?

24 A We did not need to address this issue because

1 the project developers have committed right from
2 the outset to use the radar activated lighting
3 which means that, for the most part, there will
4 be no lighting at night of the facility. So
5 it's not necessary to evaluate that in depth.

6 Q Okay. In the rule that I just stated, did it
7 state an exemption for that type of lighting?

8 A No. It doesn't speak to that.

9 Q Okay.

10 A I think it's based on assumption that, I don't
11 think it anticipated or at least identified that
12 option in this regard, but I can't speculate on
13 that certainly.

14 Q How many other, what other projects in the
15 United States are the radar activated lights in
16 operation?

17 A I think there was pilot project elsewhere. I
18 think there's a reference to it either or we
19 looked up in our research, I can't remember the
20 exact place, but I can tell you that radar
21 activated lighting is now being installed for
22 another project in Vermont. Kingdom Community
23 Wind is now in the process of installing it.

24 Q Have they received FAA approval?

1 A Yes, they have.

2 Q So is it your conclusion that it was a foregone
3 conclusion that this project would obtain that
4 approval? And therefore, you did not provide a
5 description and characterization of the
6 potential visual impacts as required by the
7 rule?

8 MR. NEEDLEMAN: Well, Jason, I think that
9 is a slight mischaracterization because there is
10 a portion in the VIA entitled Project Lighting.

11 MR. REIMERS: If you can point me to it.

12 MR. NEEDLEMAN: I think it's page 37.

13 Q Mr. Raphael, does page 37 describe why no such
14 visual impact description and characterization
15 was provided?

16 A If you would give me a moment, I'll review it.

17 I think we addressed the lighting and then
18 we represented the fact that it was expected
19 that the radar assisted lighting system would be
20 employed and that the intent has been to do so
21 all along, and, therefore, that was incorporated
22 into our approach and we did not discuss
23 lighting further from that point.

24 Q Okay. How much have you been paid for your work

VISUAL ASSESSMENT

for the Antrim Wind Project



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cleared area, the gradual uphill slope, as well as the low profile of these facilities (i.e. generally do not rise above tree level). There will be a staging area of less than 2 acres cleared to the north of the substation and O&M facility that will benefit from the existing buffer along Route 9, and 100 feet of vegetation will be retained along and parallel to the highway. Once construction is complete, this area will be allowed to revegetate naturally, which is often quicker and more effective than planting measures. To reinforce the buffer along Route 9, an area adjacent to the southern edge of the buffer and where clearing abuts the buffer, will be planted with a dense landscape screen of evergreen and deciduous trees. Additionally, some landscape plantings will be added to the entry area adjacent to the access road to close the opening and provide further screening of the facility (see Exhibit 19). The 3-acre temporary laydown area will be situated approximately a mile east of the access road on the southern side of Route 9. This area will also be screened by an existing vegetative buffer, and will be allowed to revegetate once construction is complete. Collectively, the turbine foundations, construction pads, access roads, O&M facility, substation, laydown area, and electrical upgrades are anticipated to directly impact an area of about 57.1 acres, including initial clearing for construction. After all post construction restoration and revegetation is complete (45.8 acres), the footprint of the physical facilities will impact an area of 11.3 acres.

2. PROJECT LIGHTING

The wind turbines and permanent met tower will be illuminated in accordance with FAA requirements for turbine lighting in order to address aviation safety. The FAA requires lighting of perimeter turbines, as well as interior turbines with a maximum gap between lit turbines of no more than ½ mile (2,640 feet). The FAA has recently issued its determinations of no hazard for the Antrim Project. As expected, 6 turbines will require nighttime red lights. These turbines are 1, 3, 4, 6, 7, and 9. Turbines 2, 5, and 8 will not have lights. One aviation obstruction light will be affixed to the rear portion of the nacelle on each turbine to be illuminated. The lights will flash simultaneously with a rapid discharge strobe (slow-on, slow-off profile), which will remain on at night to warn aircraft of the existence of the structures. According to the governing FAA standard³⁰, lights typically used in these types of applications are omni-directional, L-864 Red Flashing Lights (incandescent or rapid discharge [strobe]) with a minimum 750 candela with a 3-degree vertical beam spread.

Although the impact of the required nighttime lighting is minimized through use of a limited vertical beam spread and other mitigating factors, the Project has proposed the use of a radar-assisted lighting system to reduce the effects of nighttime lighting. Although not yet approved by the FAA for use on wind turbines in the United States, the new nighttime lighting mitigation systems utilize radar mounted on the turbines or in close proximity to the turbines to detect aircraft when they are approaching the structure at night and automatically turn on the FAA lights. The lights then automatically turn off once the aircraft has left the airspace in proximity to the wind farm. These systems permit wind turbine obstruction lights to remain off at all times unless an aircraft is operating in the vicinity of the wind farm, thus greatly reducing nighttime lighting at these wind projects. The Project has committed to install this technology as soon as the FAA approves it. The installation would either occur during construction or during operations based on when the FAA approves the technology and a commercially-viable product is available. This mitigation technology will essentially eliminate the impacts of nighttime lighting on potential users of the Project area resources.

³⁰ U.S. Department of Transportation Federal Aviation Administration. Obstruction Marking and Lighting Chapter 13, February 2007. (FAA AC 70/7460-1K)

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May 21, 2021

Chair, Public Utilities Commission
Dianne Martin, Chairwoman
New Hampshire Site Evaluation Committee
21 South Fruit Street, Suite 10
Concord, NH 03301

Mr. Jonathan A. Evans
Presiding Officer
New Hampshire Site Evaluation Committee
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

RE: Counsel for the Public – Comments on Investigation of Complaints Regarding Antrim
Wind Energy Facility
(Docket No. 2021-02; Docket No. 2015-02)

Dear Chairwoman Martin and Presiding Office Evans:

On May 21, 2021, a Site Evaluation Subcommittee (“Subcommittee”) charged with investigating alleged complaints of, among other things, project lighting held a public meeting. Previously, the Subcommittee established a deadline of May 18, 2021, for any written submittals and precluded live testimony or comments at the meeting. Antrim Wind Energy, LLC (“Antrim Wind”), submitted comments prior to the deadline as required, specifically at 4:30 p.m. on May 18, 2021. Antrim Wind made an additional submittal on the ongoing sound issue unrelated to the public meeting on May 20, 2021. The Subcommittee reviewed all relevant information and will soon make a recommendation to the full Site Evaluation Committee.

Turbine Lighting

Counsel for the Public has no issue with the Subcommittee’s pragmatic approach to the current problem related to the Aircraft Detection Lighting System (“ADLS”). However, having reviewed the submittals of Antrim Wind and listened to the Subcommittee discussion, Counsel for the Public believes that it may be beneficial to the Subcommittee and to the full Site Evaluation Committee to be made aware of its position on certain standards.

In its May 18, 2021 submittal, Antrim Wind states that in order to comply with its Certificate of Site and Facility (“Certificate”), it need only submit approval of the ADLS from

the Federal Aviation Administration (“FAA”) and abide by the FAA’s Determination of No Hazard to Air Navigation. Specifically, Antrim Wind states:

In summary, the Certificate required that Antrim Wind do two things with respect to turbine lighting, which are set forth in full in Section III below. Antrim Wind has complied with both conditions by (1) filing with the Site Evaluation Committee (“SEC”) the Federal Aviation Administration’s (“FAA”) approval of Antrim Wind’s Aircraft Detection Lighting System (“ADLS”) and (2) abiding by the FAA’s Determinations of No Hazard to Air Navigation.

Therefore, Antrim Wind is not in violation of its Certificate.

Antrim Wind submittal, pg. 1. Antrim Wind restates this position later in its letter:

Antrim Wind has fully complied with its Certificate. Antrim Wind was required by the SEC to do two things: (1) comply with the conditions of the FAA Determinations of No Hazard to Air Navigation, which it has, and (2) file with the SEC Administrator, on receipt, the FAA’s approval of the ADLS, which it did.

Id. at 6-7. Antrim Wind appears to argue that, although it is working in good faith to ensure a functioning ADLS, these efforts are essentially gratuitous. This position is troubling and may be problematic if future issues with lighting arise. Specifically, if this position is accepted, Antrim Wind is under no obligation to ever properly run the ADLS.

Although it is true that two conditions of the Certificate require the measures described above, the argument that this achieves compliance is contrary to the terms of RSA ch. 162-H, the order granting the Certificate, and the Certificate itself. The proper functioning of the ADLS, and the positive impacts this would have, were material parts of Antrim Wind’s application. This fact was so important to the application process that the applicant, Antrim Wind, and the Site Evaluation Committee relied on it to satisfy, or supersede, N.H. Admin. R. Site 301.05(b)(9). That rule requires:

If the proposed facility is required by Federal Aviation Administration regulations to install aircraft warning lighting or if the proposed facility would include other nighttime lighting, a description and characterization of the potential visual impacts of this lighting, including the number of lights visible and their distance from key observation points....

During testimony, when asked about Site 301.05(b)(9), a witness for the applicant stated:

We did not need to address this issue because the project developers have committed right from the outset to use the radar activated lighting which means that, for the most part, there will be no lighting at night of the facility. So it’s not necessary to evaluate that in depth.

Docket No. 2015-02, Transcript, Day 5, Afternoon at pgs. 57-58.

The Site Evaluation Committee relied on this representation when it issued its Decision and Order Granting Application for Certificate of Site and Facility (“Order”) stating: “*In addition* [to the applications to the FAA], the Applicant agreed to *utilize* a radar activated lighting control system, Aircraft Detection Lighting System, (ADLS), once approved by the FAA.” Order, pg. 154 (emphasis added). The Order also references an agreement with the Appalachian Mountain Club that relates to lighting. That agreement refers to operation of, not just approval for, the ADLS stating that “AWE shall install and *operate* the Radar System,” “AWE shall be required to implement and *operate* the Radar System,” and “AWE will commence with *operation* of the Radar System as soon as commercially reasonable . . .” *Id.*, pg. 154-155 (emphasis added). Finally, the Order states:

The Subcommittee finds that the light associated with operation of the Project will not have an unreasonable adverse effect on health and safety *if* the Project will be equipped with the ADLS. In reaching this conclusion, the Subcommittee considered that the Project’s lights *will be radar operated*, to secure their safe operation, and the Applicant will have to receive prior approval from the FAA for the installation of the ADLS.

Id., pg. 156 (emphasis added).

In addition, the very first condition of the Certificate states: “[I]t is hereby ORDERED that the *Application* of Antrim Wind Energy, LLC, as amended, *is approved* . . .” Certificate, pg. 2 (emphasis added). In other words, the project *as requested* has been approved. Material impacts under the jurisdiction of the Site Evaluation Committee must be addressed in the application and cannot be unilaterally modified thereafter. Specifically, RSA 162-H:7, IX states: “The applicant shall immediately inform the committee of any substantive modification to its application.” Changing the project to no longer include functional ADLS lighting would be just such a change. If Antrim Wind wishes to modify its project, there is a process for doing so; however, construction or operation of a project that is materially different than the project applied for is a violation of the statute, the Order, and the Certificate.

Enforcement of the Certificate

Antrim Wind seems to suggest that complaints from members of the public should not be acted upon if they request an improper procedure or ask for actions outside of the specific relief available at the moment. Members of the public may not precisely understand the procedural constraints in all sections of the statute and rules. This does not render a complaint infirm. The Site Evaluation Committee has the tools necessary to determine an appropriate outcome.

The Site Evaluation Committee should keep in mind that violations of the Certificate need not necessarily result in revocation or suspension. Such action is discretionary. *See* RSA 162-H:12 (stating that the Site Evaluation Committee “may” take action).¹ In addition to

¹ Counsel for the Public is aware that Site 302.01 includes the mandatory word “shall”; however, to the extent that the rule contradicts the statute, the statute takes precedence. The Site

revocation or suspension, the statute provides for appropriate injunctive relief or penalties. RSA 162-H:19. Finally, not every deviation from the requirements of the Certificate must be considered a violation. The Site Evaluation Committee can determine whether a deviation from the requirements of the Certificate or approved project are reasonably within the scope of what was approved. For instance, if a project with lighting is approved, it is reasonable to believe that a bulb may burn out and be replaced and that such a circumstance is reasonably within the bounds of the permitted activity.

Issues Related to Sound

Counsel for the Public may make future comments on issues relating to sound measurement.

Thank you for your time and attention to this matter.

Sincerely,

K. Allen Brooks (CMc)

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Evaluation Committee can also waive this rule if necessary. Taken as a whole, the enforcement mechanisms in RSA ch. 162-H serve as tools to achieve a just result.

1 addressed and is minimized as much as possible.

2 Maybe we can discuss that real
3 quick and move on?

4 PRESIDING OFFICER SCOTT: So if I
5 could paraphrase, what I think you're saying is
6 because of the automatic detection system,
7 which, your words, minimizes the light impacts,
8 you don't feel that the lighting in that mode
9 would have an unreasonable impact. Is that a
10 fair --

11 DR. BOISVERT: Yes.

12 PRESIDING OFFICER SCOTT: I agree with
13 that also. Mr. Forbes.

14 DIR. FORBES: This raises a question
15 for me regarding one of the assertions made
16 during testimony regarding the completeness of
17 the Application and the requirements for
18 nighttime visual simulations. Do we need to do
19 anything to address the completeness of the
20 Application in that regard?

21 PRESIDING OFFICER SCOTT: Well, I'll
22 defer to Attorney Iacopino in a second. I mean,
23 we did -- we started this proceeding with
24 accepting the Application. So we effectively

1 said there's enough there and it's complete
2 enough to do our work. I do envision -- and we
3 can do it now or later -- a condition regarding
4 the FAA lighting, since my understanding is they
5 don't have that approval at this point. So I
6 want to make sure that, assuming we issue a
7 certificate, that that be implemented. So I
8 want to see that. And I guess one of the
9 discussion items, my presumption would be,
10 leaping way ahead here, but that we would not
11 want to see them operate without that; right?
12 Because if the FAA doesn't grant that, the
13 default would be the lights are on all the time
14 at night.

15 DR. BOISVERT: Yes. I believe it was
16 six of the nine towers. Wasn't all of them, but
17 on six of them. And it is an effect. The
18 question for us to decide is: Is it an
19 unreasonable effect if it's just the six and
20 there is no FAA approval? They have maintained
21 that the FAA approval has been requested and
22 it's highly likely to be approved. The question
23 then becomes, you know, should we make that a
24 condition?

1 MR. ROSE: I'd like to also point out
2 that receiving that approval from the FAA was
3 also one of the elements that was included in
4 the MOU that they reached with the AMC. So that
5 was something they stated they were going to do,
6 and that was one of the key principles of the
7 agreement with the AMC. So I think a condition
8 such as that would be appropriate.

9 PRESIDING OFFICER SCOTT: And to
10 clarify, the condition would be they can't
11 operate until approval.

12 MR. ROSE: Correct.

13 PRESIDING OFFICER SCOTT: I concur
14 with that. I think a lot of that is built in.
15 I'm not saying the Applicant said anything
16 different. But there's been no assertion that
17 they would ever operate without that system in
18 place, at least that I can -- I apologize. My
19 voice is trailing off I think.

20 Any other discussion on the
21 potential for a condition for the FAA lighting?

22 MS. WEATHERSBY: I think there may
23 have been some discussion about that they wanted
24 to operate with normal lighting until they got

1 approval. And we could condition it that they
2 diligently pursue it, and then once they get
3 approval, diligently put the new lights on. Or
4 we just -- personally, I'd probably be more in
5 favor of you need to have the radar-activated
6 nighttime lighting approval before you can
7 commence operation, because they said it was
8 likely to be approved and -- it's how strict do
9 we want to be about it I guess is the point of
10 conversation.

11 PRESIDING OFFICER SCOTT: And to
12 clarify my point, I was going in the same
13 direction. My concern would be, if we were to
14 certificate without it -- meaning, implying that
15 if you don't get it, it's okay -- if the FAA
16 never got around to doing it, what we're saying
17 is they can operate without that, you know, and
18 move it forward for as long as the Project's
19 there, which may be appropriate, but I'm not
20 sure we've really had that discussion. I think
21 that's what you're teeing on; is that fair?

22 MR. ROSE: Correct me if I'm wrong,
23 but I think that was also the assumption that
24 was made within the Application itself, because

1 there wasn't a lot of nighttime simulations as a
2 result of the fact they were going to have this
3 technology in place. So I think it's reasonable
4 for us to assume that that would be something
5 that would be in place prior to its operation.

6 MR. CLIFFORD: I thought that was one
7 of the key assumptions we were making and that's
8 why we didn't see --

9 (Court Reporter interrupts.)

10 MR. CLIFFORD: That's why we didn't
11 see nighttime visual simulations.

12 I also note that I think I
13 remember discussion that there is at least one
14 wind farm that has this particular type of
15 radar detection system installed, and I think
16 it was in Wyoming. So I think it would behoove
17 us to put a similar or some kind of condition,
18 were we to go forward, that this does get
19 installed so that we're not in the situation,
20 as Ms. Weathersby talked about, where it never
21 gets done. And I think there was an explicit
22 statement in there that it was going to be
23 done. And that was a key component of not
24 having the nighttime lighting, was to have this

1 other system in place that could automatically
2 detect aircraft.

3 PRESIDING OFFICER SCOTT: And I think
4 I agree with Commissioner Rose. I'd be a little
5 bit uncomfortable with the level of analysis
6 that's been done, assuming it doesn't happen.
7 That, to me, is something that wasn't fully
8 vetted. If we're going to go down that road, I
9 think I would have liked it. So, feeling --
10 without that condition, I feel we're a bit on
11 unstable ground I think. I don't know if
12 anybody else has any thoughts on that.

13 MS. WEATHERSBY: I agree with you.
14 And I guess I have a question for Attorney
15 Iacopino.

16 If for some reason FAA says,
17 absolutely not, you cannot have this, there
18 would be a chance for them to come back to the
19 SEC and ask us to release that condition, I'm
20 guessing, and then we'd have a hearing on that?
21 What would be the procedure if somehow the FAA
22 said no?

23 MR. IACOPINO: They could certainly
24 come to the Committee and seek to amend the