#21-130 It was moved by Stash and seconded by McLaughlin to **approve** County Engineer Pat Sloan to send a certified letter and the maximum fine be \$500 per turbine per incident. Vote shows: 7 ayes, 0 nays and 5 absent.



Pat Sloan <psioan@marshallcountyillinois.com>

FW: [Company Restricted] Bennington ADLS

3 messages

Brenda Graves <graves@akuoenergy.com> To: Pat Sloan <Psloan@marshallcountyillinois.com>

Thu, Dec 23, 2021 at 11:02 AM

Hi Pat,

Please see the update below on the ADLS system. If you have any questions, please let me know.

Warmest Regards,

Brenda

From: Tracy Smith < Tracy. Smith@terma-us.com> Sent: Wednesday, December 22, 2021 2:52 PM To: Brenda Graves <graves@akuoenergy.com> Cc: Henry, Scott <scott.henry@whiteconstruction.com> Subject: [Company Restricted] Bennington ADLS

COMPANY RESTRICTED | TERMA Proprietary

Hi, Brenda,

The all important tweaking has now gotten us the attached report from last night where the lights were off 77% of the time. We're going to continue to monitor for a bit longer after the holidays, rather than hang our hats on one night's report. System is looking really good though.

After the holidays we'll also work with David for some remote 'training' to help him understand how to pull activity data from the system so he can roll it into the systems and reports that he's needing.

Happy Holidays to you and yours.

Tracy

Tracy Smith Senior Program Manager

Terma Inc.

2461 South Clark Street, Suite 810, Arlington, VA 22202 T+1 478-213-9615 (mobile) www.terma-us.com . Social media

Please note new email address and company website

This e-mail (and attachment(s), if any) - intended for the addressee(s) only - may contain confidential, copyright, or legally privileged information or material, and no one else is authorized to read, print, store, copy, forward, or otherwise use or disclose any part of its contents or attachment(s) in any form. If you have received this e-mail in error, please notify me by telephone or return e-mail, and delete this e-mail and attachment(s). Thank you,

Classifier Attachment List:

[22-DEC_BenningtonDaily_Executive_summary__Day_07E50C16_Time_036EDC3A.pdf - No Marking] [22-DEC_BenningtonDaily_Executive_summary__Day_07E50C16_Time_036EDC3A.pdf - No Marking]

22-DEC_BenningtonDaily_Executive_summary__Day_07E50C16_Time_036EDC3A.pdf 48K

Pat Sloan <Psloan@marshallcountyillinois.com> To: Brenda Graves <graves@akuoenergy.com>

Thu, Dec 23, 2021 at 11:06 AM

Brenda, looks much better on paper and I hope that the residents out there are feeling better.

I would appreciate reports periodically so that we can make sure it is working the best it can (and that your vendor continues tweaking if needed).

Have a great Christmas.

Pat

[Quoted text hidden]

Patrick G. Sloan, PE Marshall-Putnam County Engineer 552 State Route 26 Lacon, IL 61540

(309) 246-6401 (office) (309) 238-7623 (cell) (309) 246-3446 (fax)

psloan@marshallcountyillinois.com www.marshallcountyillinois.com www.co.putnam.il.us

Brenda Graves <graves@akuoenergy.com> To: Pat Sloan <Psloan@marshallcountyillinois.com>

Thu, Dec 23, 2021 at 11:09 AM

Hi Pat,

We certainly will send you periodic updates. I hope you and your family have a wonderful holiday as well.

Warmest Regards,

Brenda

[Quoted text hidden]

Marshall County Zoning Patrick Sloan, Zoning Administrator

552 State Route 26 Lacon, IL 61540

Phone: (309) 246-6401 Fax: (309) 246-3446

December 9, 2021

Thomas Coté, Manager Minonk Stewardship Wind LLC 415 N. Lasalle; Suite 501 Chicago, II 60654

Re: Par

Parcels No. 14-XX-XXX Special Use Permit #18-224 Minonk Stewardship Wind, LLC

Dear Mr. Coté,

This letter is notifying you that the 33 wind turbines approved by the above referenced special use permit are not in compliance with Marshall County Zoning. Condition 7 of Special Use Permit #18-224 requires at a minimum that the nighttime obstruction lighting use an Aircraft Detection Lighting System to minimize the intrusiveness of the lighting.

We have been talking to your team about this since the towers were erected. We have provided many time extensions and we've been provided a range of compliance dates, from September 15 to November 18, 2021. The update from Brenda Graves on December 7, 2021 stated why the system is not working. However, the wind farm is required to have a working system.

The Marshall County Board adopted a resolution on December 9, 2021, which directed me to proceed with enforcement and assess fines for the violations. Due to the ongoing noncompliance, I am notifying you that we will begin to assess penalties for these violations ten days from the date of this letter for turbines that are not utilizing the ADLS system. Per the ordinance, the potential fine would be up to \$500 per week per turbine.

It would be helpful for us to continue to receive regular updates and have a better understanding of your compliance plan and schedule.

Sincerely,

Patrick Sloan

Zoning Administrator

cc: Marshall County State's Attorney

Marshall County Zoning Patrick Sloan, Zoning Administrator

552 State Route 26 Lacon, IL 61540 Phone: (309) 246-6401 Fax: (309) 246-3446

December 17, 2021

Thomas Coté, Manager Minonk Stewardship Wind LLC 415 N. Lasalle; Suite 501 Chicago, Il 60654

Re: Parcels No. 14-XX-XXX-XXX Special Use Permit #18-224

Minonk Stewardship Wind, LLC

Dear Mr. Coté,

We received your response to our December 9, 2021 non-compliance letter regarding Condition 7 of Special Use Permit #18-224, namely, "The Applicant shall utilize equipment and operation that will minimize the intrusiveness of nighttime obstruction lighting, including at a minimum, an Aircraft Detection Lighting System, consistent with FAA requirements."

We have not assessed fines to-date and prefer that Minonk Stewardship Wind, LLC continue to make improvements which will minimize intrusiveness of lighting. The letter from your vendor, Terma, dated December 14, 2021, identifies several points – Namely, the ADLS has not been fully optimized. Terma states they "continue to monitor the system and adjust parameters based on the dynamic variables", "the lights suppression is not yet maximized", and "we are committed to our customers and their stakeholders to continue the optimization process to preserve the night skies".

The letter from Terma indicates that continued improvements will improve the system and it is our understanding that Minonk Stewardship Wind LLC is committed to the same.

Our review of the December 6, 2021 report yielded the following observations that we would like addressed:

- There were a large number of radar detections that do not appear to be aircraft.
- The erroneous activity is triggering a timer, which per your original submittal would only occur if a radar signal were lost for a detected aircraft that is in the protected airspace. Continued efforts to exclude the erroneous detections is needed.
- The FAA circular indicates that a regulatory timer for a system that is not continuously tracking aircraft can be set for a time based on the size of the wind farm. Since is a small wind farm, it would appear that the timer could be reduced to 20 minutes +/-.
- The FAA circular states that the airspace to be protected is 1,000 feet above the highest obstruction. Review of FlightAware24 indicates that Chicago traffic routinely flies over

Minonk Stewardship Wind LLC December 17, 2021 Page 2

this airspace, probably at an altitude greater that 10,000 feet. Please address and calibrate the system to remove these higher-flying aircraft from triggering the lights.

We will suspend assessment of fines provided continued improvements are implemented. To remain in good standing provide system reports monthly until the ADLS is optimized. The report should summarize what improvements were made during the period. The ADLS is the minimum required to comply with Condition 7. Once it is optimized, we will determine if additional steps are required.

Sincerely,

Patrick Sloan

Zoning Administrator

Para-8

cc: Marshall County State's Attorney



December 15, 2021

Patrick G. Sloan Marshall County Zoning Administrator 552 State Route 26 Lacon, IL 61540

With copy to: Marshall County State's Attorney 122 North Prairie St. P.O. Box 328 Lacon, IL 61540

Re: Parcels No. 14-XX-XXX-XXX Special Use Permit #18-224 Minonk Stewardship Wind, LLC

Dear Mr. Sloan,

I am writing in response to the Marshall County Zoning letter dated December 9, 2021, in reference to Special Use Permit #18-224 - Condition 7, which requires at a minimum that the nighttime obstruction lighting use an Aircraft Detection Lighting System (the "ADLS") to minimize intrusiveness of the lighting. Further the referenced letter communicates that the Marshall County Board adopted a resolution directing you (Patrick Sloan) to proceed with enforcement and assess fines for the violations of said Condition 7 due to ongoing noncompliance. This letter is being issued to dispute reference claims and to state for the record that the ADLS is fully operational and has completed site acceptance testing and was placed into operation of Friday, November 26, 2021.

For the record, the ADLS system is fully operational and meets the aircraft detection lighting system requirements specified in FAA regulation AC_70_7460_1M. As a point of clarification, Condition 7 requires the use of an ADLS by Bennington Wind Project, which we have confirmed is fully operational and therefore meets the requirement of Special Use Permit #18-224 - Condition 7. To provide additional third-party verification of the November 26, 2021, placed in service date, I am including as an attachment a letter from Terma, Inc. dated December 14, 2021.

On December 7, 2021, Brenda Graves, Akuo Project Manager provided to Marshall County via email a status update regarding Akuo efforts to work with the manufacturer, Terma, Inc. to maximize the lighting suppression system.

The Bennington Wind Farm is compliant with Condition 7 of Special Use Permit #18-224, as a fully operational ADLS has been installed and meets the FAA regulations. Bennington Wind Project therefore rejects the claim by Marshall County Zoning to assess fines under Special Use Permit #18-224 - Condition 7,

Sincerely,

Thomas Coté Manager

Minonk Stewardship Wind LLC

ATTACHMENT 1

14 December 2021



Akua energy USA 415 N. Lasalle; Suite 501 Chicago, Illinois 60654

Attn: Ms. Brenda Graves, Senior Project Manager

Terma Inc.

2461 South Clark Street Century II, Suite 810 Arlington, VA 22202 USA T: +1 (703) 412-9410 F: +1 (703) 412-9415

www.terma.com

Bennington Wind Aircraft Detection Lighting System

The Aircraft Detection Lighting System (ADLS) at Bennington Wind completed site acceptance testing and was placed into operation on Friday, November 26, 2021.

Each ADLS installation is unique as a radar's performance is affected by site specific variables such as terrain, static obstructions (e.g. billboards), climate, antenna height, ground traffic, air traffic, etc. An ADLS completes acceptance testing based on conditions at time of testing. After the system goes into operation, Terma continues to monitor the system and adjust parameters based on the dynamic variables (climate, ground traffic, air traffic, etc.). During this time, it allows us to adjust the many system parameters to truly optimize the performance, while keeping the system safely in operation. The goal is to safely maximize the amount of time the aviation obstruction lights are suppressed during the night-time hours.

Although the lights suppression is not yet maximized, Terma confirms that the system is in full operation in accordance with the FAA regulation AC_70_7460_1M. The supplemental screenshot below shows how all turbine lights are connected to and controlled by the ADLS.

At Terma, we focus on a high level of quality, reliability and safety of our products and systems. As such, we are committed to our customers and their stakeholders to continue the optimization process to preserve the night skies.

Yours sincerely,

Tracy Smith
Sr. Program Manager
TERMA US
Tracy.Smith@Terma-US.com

