

**COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING**

**In the Matter of the Application of Barrelhead Solar,)
LLC for a Certificate of Construction for an)
approximately 54-Megawatt Merchant Electric)
Generating Facility in Wayne County, Kentucky)
pursuant to KRS 278.700, et seq., and 807 KAR 4:110) **Case No. 2025-00177****

POST-HEARING BRIEF

Pursuant to 807 KAR 5:110, Section 7, Barrelhead Solar, LLC (“Barrelhead”), by counsel, submits this Post-Hearing Brief. The record in this matter demonstrates that the Siting Board should approve a construction certificate for its application to construct a 54-megawatt merchant electric solar generating facility (the “Project”) with reasonable conditions as discussed throughout the record.

Barrelhead’s application and Project satisfies the criteria set forth in KRS 278.700 *et seq.* for the Siting Board to approve its application. Barrelhead filed its application for a construction certificate with the Siting Board on October 3, 2025.¹ In the application, Barrelhead provided evidence that it meets the statutorily required public notice of the project.² Throughout the pendency of the Project, Barrelhead has complied with all public notice requirements required by 807 KAR 5:110.³ Barrelhead also submitted a Site Assessment Report on October 3, 2025.⁴ The Project satisfies the criteria enumerated in KRS 278.710(1) on which the Siting Board may grant approval of the Project.

¹ KRS 278.704(1).
² KRS 278.706.
³ 807 KAR 5:110(2), (9).
⁴ KRS 278.708(2).

The Siting Board’s consultant, Harvey Economics, similarly agreed that the Project has satisfied all criteria for approval. In its report, Harvey Economics “recommend[ed] that the Siting Board approve Barrelhead Solar, LLC’s application for a certificate to construct a merchant electric generating facility”⁵ because Barrelhead has engaged in “various public outreach activities in Wayne County and in the Project area,”⁶ will have visual screening that will aid in any long-term viewshed impact,⁷ will only cause construction viewshed or noise impacts for “short periods of time,”⁸ and will have no negative impact on property values⁹ while providing positive economic benefit to the region.¹⁰

Questions were raised at the evidentiary hearing by the Siting Board and public comment regarding Barrelhead’s publication of notice and community outreach to inform local citizens about the Project. Barrelhead addressed these concerns at the evidentiary hearing but now provides additional information for the Siting Board’s consideration.

1. Public Notice and Community Outreach

Barrelhead has made substantial effort to engage the public and local officials regarding the Project in numerous ways prior to the filing of its application and during the pendency of this application.

In total, Barrelhead has published five notices in *The Wayne Weekly* about the Project. Barrelhead first published notice of the Project in *The Wayne Weekly* on March 12, 2025.¹¹ This notice advertised the public meeting that Barrelhead would hold on April 2, 2025 for residents to learn more about the Project. On July 16, 2025, August 20, 2025, and September 24, 2025,

⁵ Harvey Economics Site Assessment Report at 2-7.

⁶ *Id.*

⁷ *Id.* at 5-11.

⁸ *Id.* at 5-10; 5-29-30.

⁹ *Id.* at 5-21.

¹⁰ *Id.* at 5-46-47.

¹¹ See Application at 8; Application, Attachment D.

Barrelhead published notices of Project application filing in *The Wayne Weekly*.¹² Barrelhead notes that it only filed the tear sheet of the September 24, 2025, notice with the Siting Board, as required by KRS 278.706(2),¹³ but has attached documentation of the previous notices with this brief. On February 4, 2026, Barrelhead filed public notice of the Siting Board’s evidentiary hearing in this matter in the *Wayne Weekly*.¹⁴

Barrelhead has also been engaged with the public regarding the Project since early 2025. On April 2, 2025, Barrelhead held a public meeting at the Aspire Center in Monticello, Kentucky. Barrelhead advertised the meeting in *The Wayne Weekly* and mailed neighboring property owners notices of the meeting two weeks in advance of the meeting via regular mail.¹⁵ The meeting was an open house, and Project representatives and experts provided information regarding development, permitting, construction, and operation of the Project. Three individuals attended the meeting, and they were able to view Project maps and ask Barrelhead representatives questions about the Project.¹⁶ After the public meeting, Barrelhead mailed an official notice of the Project’s application to construct and operate a solar facility to adjacent landowners via regular mail on July 17, 2025, and certified mail on July 28, 2025.¹⁷

Barrelhead also engaged in other methods of direct contact with neighbors. In January and February 2026, Barrelhead representatives made numerous calls to adjacent landowners regarding the Project. Barrelhead representatives only spoke to two neighbors on the phone. All other neighboring residents who did not speak with Barrelhead representatives on the phone received

¹² Application, Attachment B; *see also* attachments to this Brief marked as **Exhibit 1**.

¹³ Application, Attachment D.

¹⁴ Notice of Filing of Public Notice (Feb. 9, 2026).

¹⁵ Application at 8; Application, Attachment D.

¹⁶ Application at 8-9; Application, Attachment D.

¹⁷ Application, Attachment B. In addition, Barrelhead Solar attaches **Exhibit 2**, which is the proof of delivery to 2084 Hwy 1009 N, Monticello, KY 42633 (Charles Shelton). Question was raised at the hearing as to whether this adjacent residence received notice of the project. The certified mailing was delivered to the residence on July 31, 2025.

two voicemails in which Barrelhead representatives left contact information for that resident to call or email if they had questions about the Project. Barrelhead representatives also met with Minister Nissley of the Pleasant Ridge Mennonite Church on February 5, 2026 to discuss the Project, any potential concerns, and to provide the church with contact information should any issues or need arise in the future.

Since February 2025, Barrelhead has attempted to engage Wayne County officials regarding the Project. On February 27, 2025, Barrelhead representatives met with Judge/Executive Scott Gehring and Magistrate Jeffrey Dishman regarding the Project. On May 15, 2025 and July 23, 2025, Barrelhead virtually met with Judge/Executive Gehring to discuss the Project and a potential industrial revenue bond. Barrelhead attempted to contact Judge/Executive Gehring after these virtual meetings but was unable to reach him via email, calls, and voicemail throughout the last six months of 2025. On February 5, 2026, Barrelhead representatives dropped in to Judge/Executive Gehring's office to provide him with additional Project site layout and landscaping plan information; he was at a conference out of town, but Barrelhead left paperwork and a message for him with his staff. Also, in the third quarter of 2025, Barrelhead representatives spoke with Wayne County Emergency Management Director Sherwin Corder about the Project, future training, and potential operations and maintenance employment upon Project approval.

As Barrelhead project developer Trudie Grattan testified at the evidentiary hearing, Barrelhead is committed to working with neighbors and County officials going forward to ensure that all feasible Project concerns are addressed. After the evidentiary hearing, Barrelhead spoke with the County Judge/Executive, as well as members of the Wayne County Fiscal Court in attendance at the hearing. Barrelhead and County officials are planning to conduct an informational meeting about the Project with neighboring landowners in March 2026 – the date is still to be determined.

Barrelhead also appreciated the public commenters' concern for viewshed impact the Project may have on neighboring properties. Barrelhead has already adjusted its Landscaping Plan, which is attached to this filing.¹⁸ These updates specifically address the concerns raised at the evidentiary hearing regarding the visual impact to the Shelton residence. Barrelhead will provide heavy vegetative screening directly across from the Shelton residence and around the access road to minimize viewshed impact to the residence.

Barrelhead will maintain a Project website, <https://www.barrelheadsolar.com/>, where the public may find additional Project information and contact information for Barrelhead representatives. Barrelhead also committed in its proposed mitigation measures to implement a Complaint Resolution Program to address neighbors' concerns about the construction and/or operation of the Project. Barrelhead will also participate in local job fairs and other local hiring efforts to source as much competent, local labor for the project as feasible.

2. Other concerns raised

Members of the public and regulatory agencies reasonably raise questions to ensure that any electric generating facility will not compromise public health and safety. As noted in its Complain Resolution Plan, "Safety and good community relations are among the highest priorities to Barrelhead Solar."

Solar panels are proven to be environmentally friendly. In contrast to many other types of electric-generating facilities, solar panels produce zero emissions during operations that could pollute the air.¹⁹ Solar panels are made of materials like glass, aluminum, copper, and semiconductors commonly found in household appliances and technology. Solar panels have a glass layer on top that protects the photovoltaic (PV) cell and an aluminum or steel frame.

¹⁸ Revised Landscaping Plan, attached hereto as **Exhibit 3**.

¹⁹ See Cumulative Environmental Assessment at 5.

Crystalline Silicon (c-Si) solar panels, which are the most common solar technology, do not pose a danger to human health or the environment.²⁰ Extended stress testing and leaching tests reflective of real-world conditions show that crystalline silicon solar panels pose little risk of leaching during operation, removal, and disposal.²¹ Even in the event of breakage or fire, studies show that crystalline silicon solar panels do not pose a danger to human health or the environment.²² In addition, solar facilities require no or minimal water during operation. In most instances, normal precipitation is adequate to remove dust and other debris from the panels.²³

Similar to other construction projects disturbing land in excess of one acre, Barrelhead will obtain a stormwater-during-construction permit. As a part of this process, Barrelhead will finalize its stormwater pollution prevention plan (“SWPPP”) that will utilize best practices to control erosion and contain sediment.²⁴ During the construction phase, the SWPPP focuses on immediate erosion control, such as stabilizing soil, using silt fences, and managing site runoff during installation. During the operation phase, vegetation management, maintaining Kentucky-native, deep-rooted plants will reduce sediment runoff.

Barrelhead will also maintain its decommissioning plan and bonding, consistent with state law. Any waste that is generated onsite during construction or operation will be properly disposed in accordance with all local, state, and federal regulations.²⁵

²⁰ U.S. Department of Energy, Farmer’s Guide to Going Solar (2023), *available at* <https://www.energy.gov/eere/solar/farmers-guide-going-solar> (last visited Feb. 24, 2026); North Carolina State University, NC Clean Energy Technology Center, Health and Safety Impacts of Solar Photovoltaics (May 2017), *available at* <https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf> (last visited Feb. 24, 2026).

²¹ *Id.*

²² *Id.*

²³ Cumulative Environmental Assessment at 10.

²⁴ *Id.* at 7-8.

²⁵ *Id.* at 8.

As noted in the consultant’s report, “[g]lare from sun shining off solar panels can also be a potential issue in certain locations” for any solar facility.²⁶ The project glare analysis determined that the project would have no glare impacts to airports and no red glare is predicted. Throughout its history of evaluation of solar facilities, the Siting Board has inquired into potential glare.²⁷ Several projects approved by the Siting Board have anticipated yellow and green glare. For example, the analysis for Rhudes Creek Solar indicated that 16 of the 20 observation points would have yellow glare at times, including one point that would experience 9,922 minutes of glare over the course of a year.²⁸ In contrast, analysis for Barrelhead revealed that there were only 3 out of 22 observation points that would experience yellow glare.²⁹ The observation point with the most yellow glare is a residence located east of KY 1009 and approximately 1,000 feet from the nearest solar panel. It would experience 860 minutes of yellow glare (0.16% of annual minutes) annually. The road segment experiencing the most yellow glare would be along KY 1009 with 3,225 minutes of annual yellow glare. This would amount to yellow-glare exposure—on average—for less than 10 minutes a day. The glare is predicted to occur at either sunrise or sunset when glare from the sun may override much of the potential glare effects of solar panels. Vehicles are expected to pass through the areas of potential glare within a few seconds and will not experience the full duration of the predicted glare.

²⁶ Harvey Economics Site Assessment Report at 5-2.

²⁷ The Siting Board described the differences in glare classifications in footnote 20 of *Glover Creek Solar, LLC* (K.S.B. Sept. 23, 2020). “The glare study identifies the following three types of glares as measured by the Federal Aviation Administration: Red Glare - this is the most severe rating for glare, which causes after-image. Yellow Glare -this type of glare has the potential to cause temporary after-image. Green Glare -this type of glare has low potential to cause temporary after-image.”

²⁸ See Rhudes Creek Solar Glare Analysis, filed as [Attachment 7](#) to the Application on September 7, 2021 in Case No. 2021-00127. More recently, the Siting Board approved a construction certificate for Summer Shade Solar, which submitted an assessment concluding that 12 of 18 observation points would have yellow glare, including one with 16,229 minutes of yellow glare during a year. Along the roads, 4 of 8 road segments would have yellow glare including one point on Clifton Smith Road with 9,821 minutes of yellow glare annually. See Summer Shade Glare Hazard Analysis, filed as [Appendix G](#) to the Application on April 29, 2025, in Case No. 2025-00064.

²⁹ See Barrelhead Solar’s Glare Analysis, attached as [Appendix H](#) to the Application filed on October 3, 2025, in this case.

In order to reduce potential glare impacts, Barrelhead plans to install solar panels that have antireflective coatings, which reduces the potential for glare. In addition, its landscape plan will add vegetative screening that will minimize the potential impact of glare from the panels, particularly as it relates to potentially sensitive receptors. The landscape plan would provide 2.23 miles (11,751 linear feet) of screening. It would add 8.1 acres of new trees and shrubs for screening. Accordingly, the Siting Board should consider the minimal amount of glare potentially associated with this project.

CONCLUSION

The record of the case supports its request for a certificate of construction for the project. The project has met the minimum statutory requirements, as noted by Harvey Economics. Accordingly, Barrelhead respectfully requests that the Siting Board approve a construction certificate for Barrelhead to construct its Project with appropriate conditions.

RESPECTFULLY SUBMITTED,

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