

BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

**In the Matter of the Application of Fox Squirrel Solar,)
LLC to Amend its Certificate of Environmental)
Compatibility and Public Need for the Fox Squirrel) Case No. 21-1031-EL-BGA
Solar Farm)**

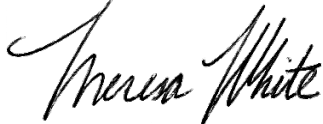
Members of the Board:

Chair, Public Utilities Commission	Ohio House of Representatives
Director, Department of Development	Ohio Senate
Director, Department of Health	
Director, Department of Agriculture	
Director, Environmental Protection Agency	
Director, Department of Natural Resources	
Public Member	

To the Honorable Power Siting Board:

Please review the attached Staff Report of Investigation, which has been filed in accordance with Ohio Power Siting Board rules. The application in this case is subject to an approval process as required by Section 4906.03 of the Ohio Revised Code.

Sincerely,



Theresa White
Executive Director
Ohio Power Siting Board

OPSB STAFF REPORT OF INVESTIGATION

Project Name: Fox Squirrel Solar Farm
Case Number: 21-1031-EL-BGA (associated with prior Case No. 20-0931-EL-BGN)
Project Location: Madison County
Applicant: Fox Squirrel Solar, LLC
Application Filing Date: October 8, 2021
Inspection Date: December 22, 2021
Report Date: January 3, 2022
Applicant's Waiver Requests: Ohio Adm. Code 4906-4-08(D)(2) through (4) to allow for a reduced study area regarding the review of cultural resources, landmarks, and visual impacts
Staff Assigned: G. Zeto

Summary of Staff Recommendations (see discussion below):

Application: ☐ Approval ☐ Disapproval ☒ Approval with Conditions
Waiver: ☒ Approval ☐ Disapproval ☐ Not Applicable

Application Description

On July 15, 2021, the Ohio Power Siting Board (Board) issued a certificate (the Certificate) to Fox Squirrel Solar, LLC (Applicant) in Case No. 20-0931-EL-BGN for the construction, operation, and maintenance of a solar-powered electric generation facility of up to 577 MW within Oak Run, Pleasant, and Range townships in Madison County. The certificated project proposed that it would occupy approximately 3,444 acres within a 3,766-acre project area.

The Applicant proposes a modification to the Certificate, with the addition of approximately 1,424 acres of private land, creating a total project area of approximately 5,190 acres. This represents an increase of approximately 38 percent. The Applicant states that although the boundary of the project is being modified, the quantities of the generation components and the overall generation capacity of the facility would remain the same as originally certificated (approximately 3,444 acres). The Applicant secured the additional land under long-term leases with four landowners, within the townships of Range and Oak Run. The inclusion of additional land has been proposed because additional landowners have expressed interest in participating in the project and have entered into lease agreements. Additionally, the Applicant states that the increased area would allow the project to optimize energy production through a more efficient layout while providing greater flexibility to minimize impacts. The Applicant has committed to comply with all conditions approved in the original Certificate.

Application Review

Aesthetics

During its review of the original application, Staff analyzed the Applicant's viewshed analysis based upon an assumption of the maximum likely adverse aesthetic impacts. As a result, the Certificate requires that the Applicant incorporate a landscape and aesthetics plan to reduce impacts in areas where an adjacent non-participating parcel contains a residence with a direct line of sight to the project's infrastructure. This condition requires that aesthetic impact mitigation include native vegetative plantings, alternate fencing, good neighbor agreements, or other methods in consultation with affected landowners and subject to Staff review.

In addition to vegetative screening mitigation measures, Staff is concerned about aesthetic impacts related to the project's perimeter fencing. In general, chain-link fences are more aesthetically intrusive, out-of-character in rural settings, and less wildlife friendly than fencing options such as deer fences or wooden woven wire fences.

The Applicant currently proposes a seven-foot chain-link design that has previously elicited many negative public comments and concerns from adjacent residents living near proposed solar facilities. The newly proposed expansion introduces a more variable fence footprint than was originally proposed. With the proposed footprint expansion and the potential for increased equipment relocation within the overall facility design scenarios, Staff opines that potential increased aesthetic impacts related to fencing choices would be mitigated by the selection of an appropriate agricultural wildlife friendly fence design.

Staff recommends that the Applicant install agricultural perimeter fencing that is both small, wildlife permeable and aesthetically fitting for a rural location. With implementation of Staff's aesthetic/lighting and fencing conditions, the overall expected aesthetic impact would be minimal.

Cultural Resources

The Applicant enlisted a consultant to gather background information and complete a cultural resources literature review for a half-mile radius around the project. This review initially was based on data provided by the Ohio Historic Preservation Office's (OHPO) online geographic information system mapping, Ohio Historic Inventory, the Ohio Archaeological Inventory, and National Register of Historic Places (NRHP) files. The Applicant also obtained information on historic cemeteries from the Ohio Genealogical Society.

The Applicant entered into a programmatic agreement which involves coordination with the OHPO to provide plans to avoid, minimize, or mitigate any adverse effects of the project on cultural resources. The Applicant coordinated with the OHPO to determine an approved work plan for the historic/architecture and archaeology field surveys within the project's area of potential effect. The final work plan for the amended project was approved by the OHPO on November 27, 2020. Fieldwork was performed between November 9, 2020 to January 29, 2021. On August 26, 2021, the OHPO office provided concurrence to the Applicant that three archaeological sites (33MA667-669) would need to be avoided or that additional testing would be required. The Applicant has committed to avoiding the three sites.

The Applicant's historical survey identified two potential historic resources, the Buckeye Bridge (OHI Ref. MAD0009911) and a 1910 schoolhouse (OHI Ref. MAD0047511). Both above ground resources are recommended as eligible for listing in the NRHP. The OHPO agrees with this recommendation for NRHP eligibility. Since these historic resources are within the viewshed of the proposed project, the Applicant's cultural resources report also recommends a vegetative screening plan be developed to minimize any adverse visual effects. The OHPO recommends that this vegetative screening plan be memorialized in a Memorandum of Understanding (MOU).

With the implementation of the programmatic agreement, Staff has determined that minimal adverse environmental impacts to cultural resources would be achieved. The vegetative screening would be implemented in accordance with a Vegetation Management Plan, which is included as Exhibit R of the application.

Noise

The Applicant conducted an updated operational noise model based on the new location of project equipment. The model showed that operational noise impacts would be less than L90 ambient noise levels. No non-participating receptors were modeled to receive noise impacts greater than the L90 ambient noise level plus five dBA. Therefore, the project would be expected to have minimal adverse noise impacts on the adjacent community. Once an inverter model is chosen, the Applicant will submit a noise report confirming that no non-participating receptors were modeled to receive noise impacts greater than the L90 ambient noise level plus five dBA.

Public and Private Water Supply

Staff reviewed Ohio Department of Natural Resources (ODNR) records and estimates that there could be an additional half-dozen water wells within the expanded project area. Ohio Department of Health highlighted, for Staff, that Ohio Adm.Code 3701-28-07(F) requires a sanitary isolation radius of fifty feet from any known or possible source of contamination to a private water well. As a condition of the original Fox Squirrel solar facility (Case No. 20-0931-EL-BGN) Certificate Condition #31 requires that at least 30 days before the preconstruction conference, Applicant shall provide the status of each water well within the project area and indicate to Staff whether the nearest solar components to each uncapped water well within the project area meets or exceeds any applicable minimum isolation distances outlined in Ohio Adm.Code 3701-28-07. Staff recommends that when the Applicant performs that analysis, the Applicant also relocate solar equipment at least 50 feet from each water well within the project area for 21-1031-EL-BGA or demonstrate that the well is for non-potable use and relocate solar equipment at least 10 feet from that well, or seal and abandon the water well.

The Applicant indicated that no source water protection areas are located on the project site; Staff also confirmed via review of Ohio EPA records that there are no public drinking water source protection areas located within the expanded project area.

Glare

The Applicant's consultant conducted an additional glint and glare analysis to identify any potential impacts along roads and to nearby residences in the expanded project area. As part of its glare analysis, the Applicant did find that for the project area, there is predicted glare along Madden Higgins-Road, Van Wagener Road, Johnston Road, Yankeetown-Chenoweth Road, and Moorman Road.

The Applicant acknowledged these areas and has accounted for them into its preliminary vegetative buffer design to ensure areas with the highest potential for glare are mitigated through vegetative buffering. Staff recommends that the project, as part of its final landscape and lighting plan, incorporate additional screening along Madden Higgins-Road, Van Wagener Road, Johnston Road, Yankeetown-Chenoweth Road, and Moorman Road in order to provide suitable concealment of the project site and mitigate any predicted glare along those roads.

Surface Waters

The additional project area would include one ephemeral, one intermittent, and one perennial stream. No new stream impacts are proposed. The additional project area would also include two wetlands. No new wetland impacts are proposed.

Adherence to the conditions of the original certificate including implementation of the storm water pollution prevention plan would minimize impacts to surface water resources that could occur as a result of the proposed modifications.

Listed Species

The proposed modifications would not result in increased impacts to listed wildlife species. Adherence to the conditions of the original certificate would minimize impacts to listed species.

Recommended Findings

Staff's review of the amendment application included consideration of the requirements listed in Ohio Revised Code Section 4906.10. Based on Staff's review, the amendment application meets the necessary criteria for granting an amended certificate. Staff recommends that the Board approve the proposed amendment to the Certificate, provided that the following conditions are satisfied.

Recommended Conditions:

- (1) The Applicant shall continue to adhere to all conditions as certificated in Case No. 20-0931-EL-BGN.
- (2) Prior to the commencement of construction activities in areas that require permits or authorizations by federal or state laws and regulations, the Applicant shall obtain and comply with such permits or authorizations. The Applicant shall provide copies of permits and authorizations, including all supporting documentation, on the case docket prior to commencement of construction.
- (3) Prior to commencement of construction, the Applicant shall submit to Staff for approval a solar panel perimeter fence type that is both small-wildlife permeable and aesthetically fitting for a rural location. This condition shall not apply to substation fencing.
- (4) The Applicant shall relocate or install solar equipment at least 50 feet from each water well within the project area for 21-1031-EL-BGA or demonstrate that the well is for non-potable use and relocate solar equipment at least 10 feet from that well, or seal and abandon the water well.
- (5) At the time of solar panel end of life disposal, any retired panel material that is not recycled and that is marked for disposal, shall be sent to an engineered landfill with various barriers

and methods designed to prevent leaching of materials into soils and groundwater, or another appropriate disposal location at the time of decommissioning approved by Staff.

- (6) The Applicant shall adhere to mitigation measures for archaeological and historic resources, including the development of a MOU with the OHPO, subject to Staff's review. The Applicant shall incorporate landscaping and screening measures for these cultural resources in its landscape and lighting plan per this condition.
- (7) Prior to commencement of construction, the Applicant shall prepare a landscape and lighting plan in consultation with a landscape architect licensed by the Ohio Landscape Architects Board that addresses the aesthetic and lighting impacts of the facility with an emphasis on any locations where an adjacent non-participating parcel contains a residence with a direct line of sight to the project area and also include a plan to describe methods to be used for fence repair. This plan shall also address aesthetic impacts to the Johnston McClimans Cemetery by its inclusion in the plan. The plan shall also address glare impacts through planting of vegetative screening along London-Circleville Road, Yankeetown-Chenoweth Road, Moorman Road, Madden Higgins-Road, Van Wagener Road, and Johnston Road. The plan shall also address potential aesthetic impacts to nearby communities, the travelling public, and recreationalists by incorporating appropriate landscaping measures such as shrub plantings or enhanced pollinator plantings. The plan shall include measures such as fencing, vegetative screening or good neighbor agreements. Unless alternative mitigation is agreed upon with the owner of any such adjacent, non-participating parcel containing a residence with a direct line of sight to the fence of the facility, the plan shall provide for the planting of vegetative screening designed by the landscape architect to enhance the view from the residence and be in harmony with the existing vegetation and viewshed in the area. The Applicant shall maintain vegetative screening for the life of the facility and the Applicant shall replace any failed plantings so that, after five years, at least 90 percent of the vegetation has survived. The Applicant shall maintain all fencing along the perimeter of the project in good repair for the term of the project and shall promptly repair any damage as needed. Lights shall be motion-activated and designed to narrowly focus light inward toward the facility, such as being downward-facing and/or fitted with side shields. The Applicant shall provide the plan to Staff for review and confirmation that it complies with this condition and shall also file it on the public docket. Additionally, the Applicant shall adhere to mitigation measures for a historic architecture resource within the project area and incorporate any landscape and screening measures for this resource in the landscape and lighting plan per this condition.

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on**

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Case No(s). 21-1031-EL-BGA

Summary: Staff Report of Investigation electronically filed by BreAnna J. Freeman
on behalf of Staff of OPSB