BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

In the Matter of the Application of Madison Fields)	
Solar Project, LLC to Amend its Certificate of)	Case No. 21-0508-EL-BGA
Environmental Compatibility and Public Need for the)	Case No. 21-0506-EL-DGA
Madison Fields Solar Project)	

Ohio House of Representatives

Ohio Senate

Members of the Board:

Chair, Public Utilities Commission

Director, Development Services Agency

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:		Madison Fields Solar Project		
Case Number:		21-0508-EL-BGA (associated with prior Case No. 19-1881-EL-BGN)		
Project Location:		Madison County		
Applicant:		Madison Fields Solar Project, LLC		
Application Filing Date:		May 7, 2021		
Inspection Date:		July 23, 2021		
Report Date:		September 17, 2021		
Applicant's Waiver Req	uests:	None		
Staff Assigned:		M. Butler, A. Conway, J. O'Dell, J. Pawley		
Summary of Staff Reco	mmend	ations (see discussion below):		
Application:	Application: Approval Disapproval Approval with Conditions			
Waiver:	Approval Disapproval Not Applicable			

Application History

On January 21, 2021, the Ohio Power Siting Board (Board or OPSB) issued a certificate (the Certificate) to Madison Field Solar Project, LLC (Applicant) in Case No. 19-1881-EL-BGN for the construction, operation, and maintenance of a solar-powered electric generation facility of up to 180 megawatts (MW) located in Pike Township, Madison County. The Certificate issued in Case No. 19-1881-EL-BGN authorized a facility occupying a 1,006-acre facility footprint within a 1,932-acre project area.

In Case No. 19-1881-EL-BGN, the Applicant stated that the exact placement of project components would be subject to change during final engineering but would remain within the project area that has been studied for environmental, engineering, and visual impacts. However, cultural resource surveys were based only on the facility footprint proposed in the application, rather than the larger project area. As a result, additional cultural resource surveys would need to be completed before any part of the facility could extend beyond the facility footprint identified in the application. In the event the Applicant identified a need to locate any facility components outside of the facility footprint, the Certificate required the Applicant to file an amendment with the OPSB, that would include a Phase I archaeological report and Ohio Historic Preservation Office (OHPO) concurrence for the additional area studied within the project area.

Application Description

In this amendment application, the Applicant proposes a modification to the Certificate to provide flexibility to extend the facility footprint within the entire certificated project area for siting the final design of the project. The Applicant has provided a Phase I archaeological report and OHPO concurrence for the previously unstudied area which has now been studied within the project area.

Although the applicant references potential layout solutions in map form, including the possibility of utilizing approximately 284 additional acres in the project area, the exact placement of project components remains subject to change during final engineering but would remain within the certificated project area.¹

Application Review

Facility Layout

The amendment application retains the layout of equipment (i.e. solar panel arrays, switchyards, substations, operations and maintenance facility, laydown yards, generation tie-lines, fence line, collection lines, access roads, and meteorological stations) that was certificated by the Board in OPSB Case No. 19-1881-EL-BGN and as represented on page 9 of the Staff Report filed in that docket on November 18, 2020. As such, there are no changes at this time to the sections and analysis in that Staff Report entitled *Glare*, *Decommissioning*, *Public and Private Water Supply*, *Wind Velocity*, *Aviation*, or *Noise*.

Land Use

The amendment application would not significantly increase impacts to existing land use or land use planning, as the perimeter boundary of the proposed facility has not expanded. The Applicant states that, among other things, the amendment application does not change the preliminary locations of the facility components nor land use information from the original application. No additional agricultural districts would be impacted, and agricultural land use would continue to be farmed on adjacent agricultural parcels. As with the original application, the Applicant also states that no residences would need to be removed or relocated for this project.

Cultural Resources

Consistent with the preparation of its original application, the Applicant enlisted a consultant to gather additional background information and complete a cultural resources records review for a 0.5-mile radius defined as the Area of Potential Effect for the project. This review was based on data provided by the OHPO online geographic information system mapping, Ohio Historic Inventory, the Ohio Archaeological Inventory, and National Register of Historic Places (NRHP) files. The Applicant obtained information on historic cemeteries from the Ohio Genealogical Society. Background research has confirmed that there are also no historic districts located within the project footprint or within the survey radius.

In March 2021, the Applicant surveyed for the historical and architectural resources in March of 2021. The survey identified a total of 24 newly recorded resources and two previously recorded resources that are over 50 years of age. Of the 26 surveyed resources, two are recommended for additional research to determine NRHP-eligibility including one that was previously recorded. The consultant recommended that the remaining 24 resources do not necessitate further research. On June 2, 2021, the OHPO concurred with the Applicant that the proposed project will have no effect on above-ground historic properties and that additional investigations are not necessary. Staff agrees with the OHPO's recommendations.

To assess the potential for archaeological impacts, the Applicant performed site surface collection and multiple shovel excavations. A total of 925 new acres were surveyed, which is the balance of

^{1.} Response to First and Second Data Requests from OPSB Staff, case no. 21-0508-EL-BGA.

the 1,932-acre project. The Applicant found 57 new archaeological sites during multiple surveys. However, none of these sites are recommended as being eligible for listing in the NRHP. The OHPO recommended on June 18, 2021, that further archaeological surveys are not needed. Staff concurs with this analysis.

Staff has reviewed the Applicant's architectural and archaeological surveys and the OHPO's recommendations. Staff concurs with the OHPO that the project is not expected to have any adverse effect to historic properties.

Aesthetics

Aesthetic impacts and considerations are always measured against the surrounding land use features and potential viewers' subjective opinions. The rural nature of the project vicinity limits the number of potential viewers. Transportation corridors typically are smaller and much more lightly traveled, which reduces the number of viewing impacts. Existing woodlots are also able to offer additional natural screening. The project area predominantly consists of agricultural land. Traffic volume on roads throughout the project area is typically light, thus abating the potential number of viewers.

An anti-glare coating would be installed on the solar panels to maximize the amount of solar energy captured by the panels, which would also have the aesthetic benefit of glare reduction. Typically, the solar panels would be installed no higher than 15 feet above ground level. Based on the results of the Applicant's original visual resources report, the solar panels would not likely be visible at locations beyond two miles of the perimeter of the project.

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. In the original application, the Applicant's fenced footprint was significantly smaller than is now proposed. The location of buffering areas would also change with subsequent equipment placement redesigns. With the proposed footprint expansion and the potential for increased equipment relocation within the overall facility design scenarios, Staff opines that 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.

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. 19-1881-EL-BGN.
- (2) 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.
- (3) At least 30 days prior to the preconstruction conference, the Applicant shall demonstrate that its solar and substation equipment is outside the protection zone(s) for the Rosedale Bible Institute.

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Case No(s). 21-0508-EL-BGA

Summary: Staff Report of Investigation electronically filed by Mr. Matt Butler on behalf of Staff of OPSB