

**Case ID - Case Name:** 19-1823-EL-BGN - Big Plain Solar  
**Company Name:** Big Plain Solar, LLC  
**Amendment(s):** 21-1196-EL-BGA  
**Related Case(s):** 21-1174-EL-BLN  
**Case Status:** Under Construction  
**Certificate Approved Date:** March 18, 2021  
**Construction Start Date:** March 10, 2022  
**Case Type:** Solar Generation  
**Capacity, Acreage:** 196.0 MW, 2438 acres  
**County(s):** Madison  
**Township(s):** Fairfield, Oak Run  
**Report Number:** CI23-19-1823-001R4

## Background

On March 18, 2021, the Ohio Power Siting Board (Board) issued a Certificate of Environmental Compatibility and Public Need (Certificate) to Big Plain Solar, LLC (Big Plain or Certificate Holder) in Case No. 19-1823-EL-BGN for the construction, operation, and maintenance of a 196 megawatt (MW) solar-powered electric generation facility (Project), subject to the conditions set forth in the Stipulation and consistent with the Opinion, Order, and Certificate. Of the 2,438 acres leased, Big Plain’s footprint occupies 1,168 of those acres located in Fairfield and Oak Run townships in Madison County. The project is currently owned and operated by Leeward Renewable Energy Development, LLC (Leeward). The general contractor onsite is SOLV Energy (SOLV). Construction began on March 10, 2022, and is still ongoing, as of the date of this report. Case No. 21-1174-EL-BGN is an OPSB approved related case, under which Big Plain is constructing a transmission facility as infrastructure to carry electricity from the facility to the grid. This infrastructure is not the subject of this compliance inquiry report.

## Summary

After completing the August 31, 2023, site inspection, Staff decided to begin conducting weekly inspections at Big Plain. On September 8, 2023, Staff filed its third response to Big Plain’s open Compliance Inquiry (CI23-19-1823-001) to the public docket.<sup>1</sup> This report detailed the findings from the August 31 inspection. Additionally, the report set October 5, 2023, for a follow-up assessment of Big Plain’s progress remediating impounded water, vegetation management, excessive rutting, and staffing levels. Following Staff’s site inspection on October 5, it was determined Big Plain’s corrective actions were advancing adequately, and no additional action was required at that time.

Following a subsequent site inspection on October 19, 2023, Staff decided to halt weekly inspections. The next inspection date was scheduled for November 29, 2023. Following the November 29 inspection, Staff determined the weekly reports Big Plain had been submitting were no longer necessary due to the slowing of construction as project completion was approaching. Findings from this inspection and subsequent communications with Big Plain are detailed below.

<sup>1</sup> [dis.puc.state.oh.us/DocumentRecord.aspx?DocID=ba0b7c28-c541-4ed9-82ff-20b833275b19](https://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=ba0b7c28-c541-4ed9-82ff-20b833275b19)



## Observations

### Impounded water

On November 29, 2023, weather and ground conditions were sufficient to evaluate progress on impounded water remediation. Key areas 1, 4, 5, and 7 were dry. Key area 3 showed some inundation due mostly to a lack of gradient. However, maintenance crews were able to mow it. Key area 2 was mostly drained due to the installation of a hickenbottom.<sup>2</sup> The recent grading in key area 4 had been seeded but not mulched. Grading was still being attempted in key area 2 at the time of inspection.

### Vegetation management

Through review of staffing level data provided in the weekly reports, Staff was able to better understand the upticks and lulls in progress for specific construction activities, one being vegetation management. On November 11, 2023, Big Plain completed mowing activities for 2023.

### Excessive Rutting

Improperly graded ground still exists onsite. Though much progress has been made, the unfinished (rutted and ridged) areas will likely have to wait until the ground dries out. Recent restoration efforts have created more problems than they have fixed. Flattening ruts in the array rows has caused obstructive ridges of soil to form under the panels. An improvised grading mechanism utilizing a pipe chained to the bucket of an excavator was witnessed unsuccessfully attempting to mitigate the ridges.

### Drain Tile System Concerns

Big Plain has not performed any kind of technical analysis of the drain tile system prior to introducing surface water control via the installation of hickenbottoms. Although the hickenbottoms appear to be functional, this is not a best management practice.

### Storm Water Pollution Prevention Plan

Big Plain has delayed the filling in of temporary sediment basins until ground conditions are more favorable. OEPA was notified and condones this course of action. SOLV will remain under contract by Leeward through the civil shutdown and until all work is complete. SOLV does not appear to be measuring, inspecting, and documenting significant precipitation events throughout construction, which is a Storm Water Pollution Prevention Plan (SWPPP) requirement.

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<sup>2</sup> A hickenbottom intake is a drainage pipe that allows surface water runoff to directly drain to the underground drain tile network.



## Recommendations and Requests

- Staff recommends restoration activities involving grading be postponed until soil conditions allow for an appropriate finish. When that time comes, Staff also recommends acquiring equipment designed to perform the restoration work efficiently.
- Staff requests all bare areas be stabilized with straw/mulch in accordance with the SWPPP.
- Staff requests to be notified in advance when the temporary sediment basins are scheduled to be filled in.
- Staff requests evidence that the SWPPP log is being maintained. If not, Staff requests that until the NPDES permit is closed out, SOLV measure, inspect, and document precipitation events as required.
- Staff requests Big Plain produce a map indicating the locations of hickenbottoms which are tied into the field tile system.
- Staff recommends monitoring neighboring properties for signs of irregular drainage patterns that may be caused by connecting hickenbottoms to the drain tile system.
- Staff is not supportive of installing future hickenbottoms at this or any other project without advance consultation with Staff as to the engineering rationale to support the need for this equipment.

Staff requests evidence of bare soil stabilization, evidence of maintaining or commitment to maintaining the SWPPP, and a map indicating the locations of hickenbottoms which are tied into the field tile system no later than **Friday, January 12, 2024, at 4:00pm EST.**

### Eric Morrison

Public Utilities Commission of Ohio  
Power Siting Department  
Field Compliance Investigator

### Attachment(s)

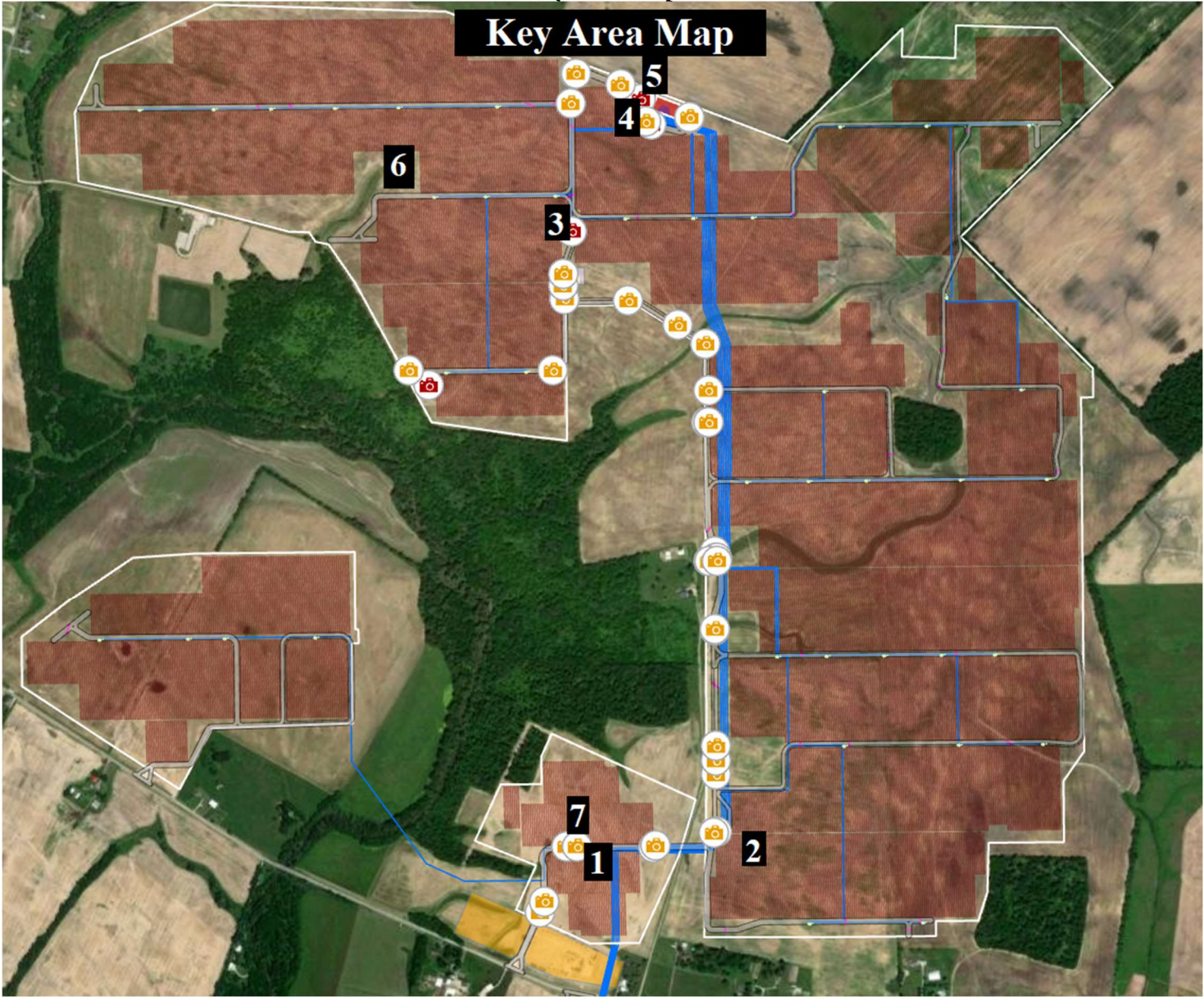
1. Key Area Map
2. Key Area 2 hickenbottom
3. Key Area 3
4. Key Area 4
5. Improvised grading tool and soil ridges
6. Block 2A hickenbottom installation

### CC:

Bryan Dhume, Madison County Engineer  
Marshall Cooper, Ohio EPA  
Michael Settineri, Vorys  
Matt Pellinen, Leeward Renewable Energy  
John Jones, Ohio Attorney General's Office  
Matthew Sandor, Attorney Examiner  
Patricia Schabo, Attorney Examiner  
Jessie Klemme, SOLV Energy



Key Area Map





**Key Area 2 Hickenbottom**





Key Area 3



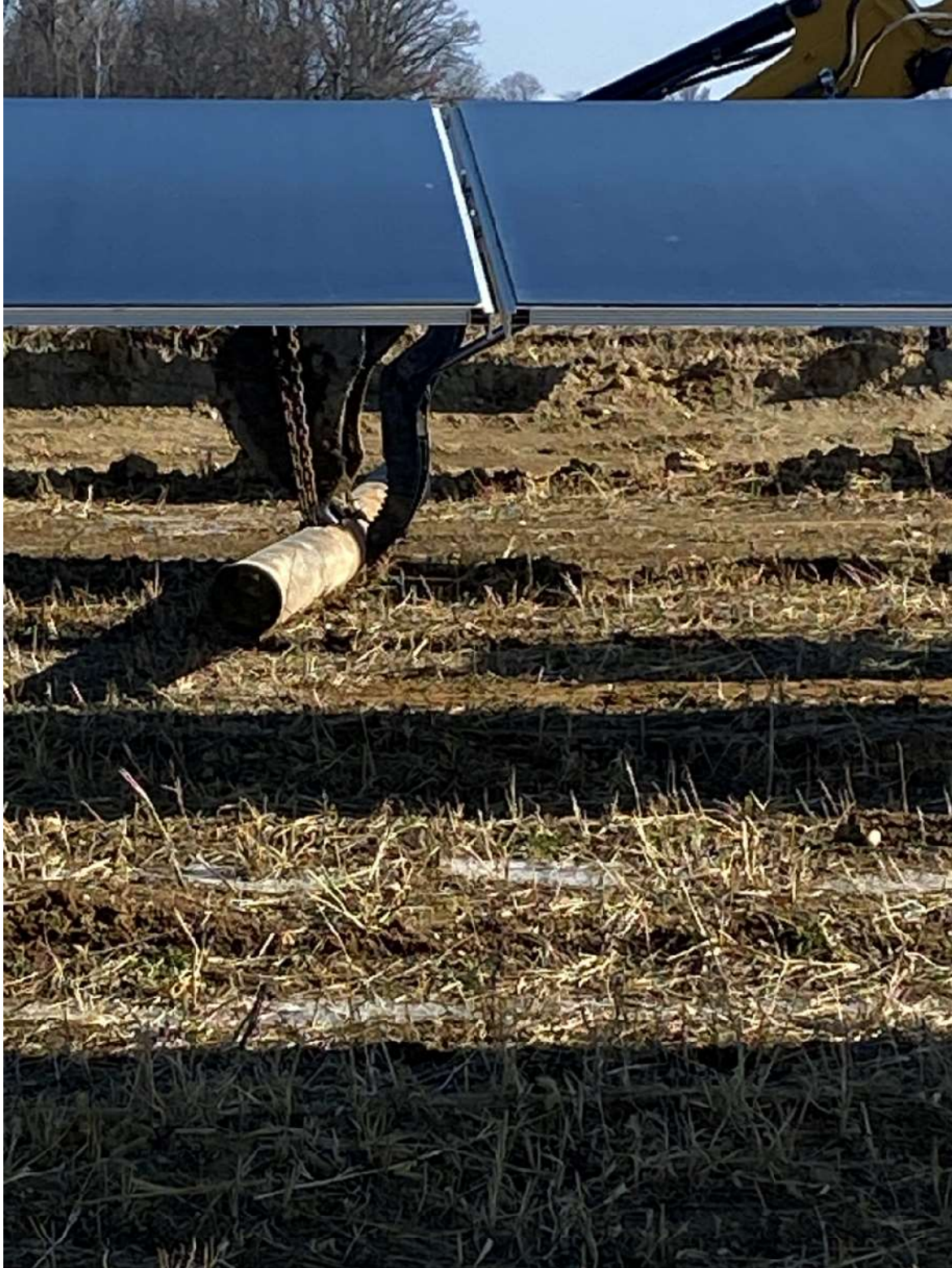


Key Area 4





**Improvised grading tool and soil ridge rows**





**Block 2A Hickenbottom Installation**





**This foregoing document was electronically filed with the Public Utilities  
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**in**

**Case No(s). 19-1823-EL-BGN**

Summary: Report containing Staff's fourth interim report filed in regard to Big Plain Solar compliance inquiry CI23-19-1823-001 electronically filed by Eric R. Morrison on behalf of OPSB Staff.