# Letter of Notification for the Scioto Darby Creek Road Fuel Cell System Project


Case No. 25-0649-EL-BLN

Submitted to:
The Ohio Power Siting Board
Pursuant to Ohio Administrative Code
Section 4906-6-05

Submitted by:
Ohio Power Company

June 23, 2025

# LETTER OF NOTIFICATION

# Ohio Power Company

# Scioto Darby Creek Road Fuel Cell System Project

## 4906-6-05 Accelerated Application Requirements

Ohio Power Company (the "Company") provides the following information to the Ohio Power Siting Board ("OPSB") in accordance with the accelerated application requirements of Ohio Administrative Code Section 4906-6-05.

## 4906-6-05(B) General Information

### B(1) Project Description

**Provide the name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a letter of notification or construction notice application.**

The Company is proposing the Scioto Darby Creek Road Fuel Cell System Project (the "Project"), located in the City of Hilliard, Franklin County, Ohio. The Project involves installation of solid oxide fuel cell systems capable of 72.9 megawatts ("MW") of electricity output within approximately 6.4 acres of the customer's existing industrial facility. The fuel cell systems will convert natural gas to electricity without combustion through induction of a chemical reaction to generate electricity. A 34.5 kilovolt ("kV") underground distribution line will extend from the fuel cell to a Point of Interconnection at the customer's distribution substation approximately 200 feet to the east. A natural gas supply line to the fuel cell will be provided by a separate entity, and filed with OPSB separately, if required. The location of the Project is shown on **Figure 1** and **Figure 2** of **Appendix A**.

The Project meets the requirements for a Letter of Notification ("LON") as defined by Item 1 of Appendix C to Ohio Administrative Code Section 4906-1-01, *Application Requirement Matrix for Electric Generation Facilities*:

*(1) An electric generation facility designed for, or capable of, operation at a capacity of fifty megawatts or more that uses waste heat or natural gas and is primarily within the current boundary of an existing industrial or electric generation facility.*

The Project has been assigned Case No. 25-0649-EL-BLN.

## B(2) Statement of Need

**If the proposed project is an electric power transmission line or gas pipeline, the applicant provide a statement explaining the need for the proposed facility.**

This section is not applicable because the Project does not include new electric power transmission lines or gas pipelines. However, the Company is submitting a description of the need for the Project for informational purposes.

A customer is constructing an adjacent data center, with initial electricity load of 328 MW to be supplied by the Company and its affiliates through enhancement of transmission infrastructure including Beacon Station (Case No. 23-0691-EL-BLN), Beacon-Darby 345 kV Tie Lines (Case No. 24-1036-EL-BNR), and Hayden-Roberts 345 kV Cut-in (Beacon Station) (Case No. 24-0630-EL-BLN). The customer requested additional load for future expansion of its facility. The proposed Project with its fuel cell system is a capacity solution that will provide a bridge between now and the 7-10 years in the future when new transmission infrastructure may be placed in service and the customer will be able to expand its facility.

## B(3) Project Location

**Provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the project area.**

The location of the Project in relation to existing transmission lines and substations is shown on **Figure 1** in **Appendix A**. No transmission lines or substations are proposed.

## B(4) Alternatives Considered

**Describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility, including, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.**

The proposed location of the fuel cells is the most suitable location for the Project because it is located on a customer property for sole use by the customer. Other alternatives would not align with the electricity needed at the customer facility. Since the proposed location of the Project is located within a customer's existing industrial facility, the Project will not require additional tree clearing or have impacts to any delineated wetland, streams, or cultural resources eligible for listing on the National Register of Historic Places ("NRHP"). Impacts to one wetland delineated previously in the area of the fuel cells have been permitted through the customer's development of the property. The proposed location of the Project minimizes impacts on the community and the environment, while considering the needs of the customer. The Project also represents the most suitable location and most appropriate solution for meeting the Company's needs.

### B(5) Public Information Program

**Describe its public information program to inform affected property owners and residents of the nature of the project and the proposed timeframe for project construction and restoration activities.**

The Company will inform affected property owners and residents about this Project through several different mediums. Within seven days of filing this LON, the Company will issue a public notice in a newspaper of general circulation in the Project area. The notice will comply with all requirements of Ohio Administrative Code Section 4906-6-08(A)(1-6). The Company will also mail a letter, via first class mail, to property owners and affected residents. The letter will comply with all requirements of Ohio Administrative Code Section 4906-6-08(B). Further, at least seven days prior to commencement of construction, the Company will mail a letter to property owners and affected residents that complies with all requirements of Ohio Administrative Code Section 4906-6-11(C). The Company maintains a website (https://AEPOhio.com/OPSBFilings) which provides public access to an electronic copy of this LON and the public notice for this LON. An electronic copy of the LON will be served to the chief executive officer of each municipal corporation, county, township, and the head of each public agency charged with the duty of protecting the environment or of planning land use in the Project area and to the public library in each political subdivision for this Project.

### B(6) Construction Schedule

**Provide an anticipated construction schedule and proposed in-service date of the project.**

Construction of the Project is planned to begin in January 2026 with an anticipated in-service date of September 2027. However, the in-service date will be dependent on natural gas supply delivery to be provided by others.

### B(7) Area Map

**Provide a map of at least 1:24,000 scale clearly depicting the facility and proposed limits of disturbance with clearly marked streets, roads, and highways, and an aerial image.**

**Figure 1** in **Appendix A** identifies the location of the Project area on a map of 1:24,000 scale on the United States Geological Survey ("USGS") 7.5-minute topographic quadrangle maps of Northwest Columbus and Hilliard, Ohio. **Figure 2** in **Appendix A** displays the Project components on a 2023 aerial photograph.

### B(8) Property Agreements

**Provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.**

A list of properties required for the Project are provided in **Table 1**, below.

**Table 1 – Property Agreements**

| Property Parcel Number | Agreement Type | Easement or Option Obtained (Yes/No) |
|---|---|---|
| 050-002806 | Easement | No (to be obtained prior to construction) |

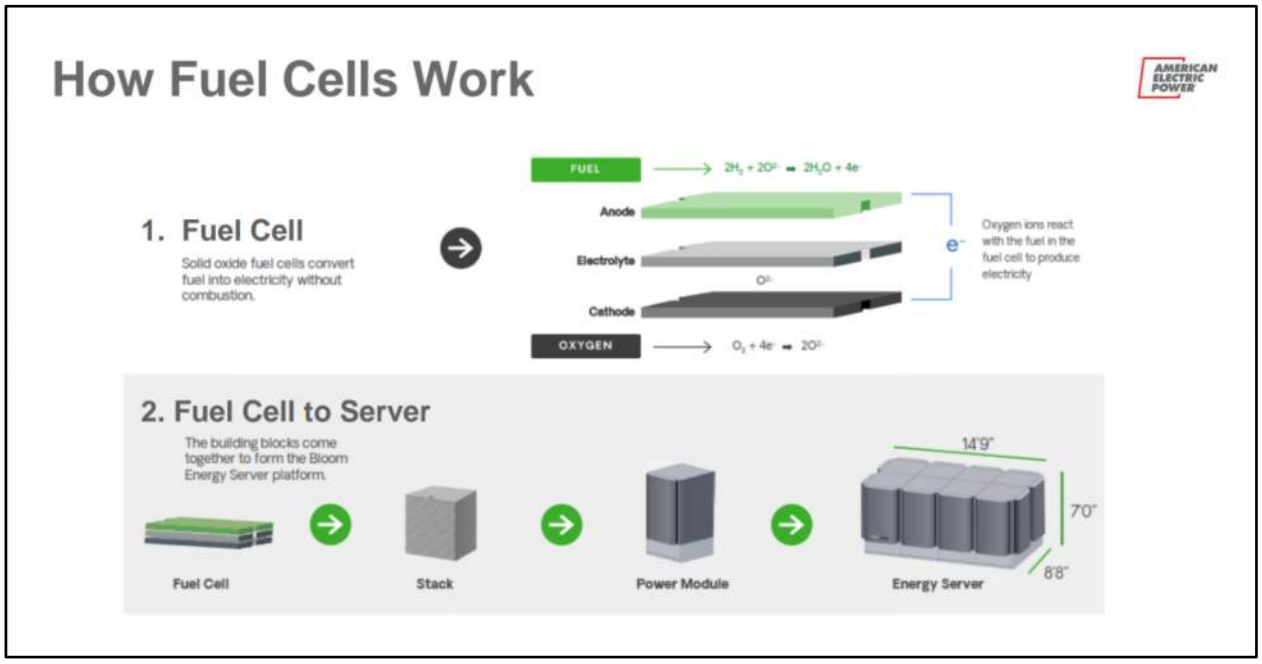
## B(9) Technical Features

**Describe the following information regarding the technical features of the project:**

### B(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.

The equipment and facilities to be installed for the Project are anticipated to include 228 energy servers to achieve 72.9 MW. **Exhibit 1** provides a diagram of the parts of an energy server.

**Exhibit 1 – Energy Server Components**



The fuel cell system has redundant safety features and in-system checks to ensure that the system will not harm certified technicians or bystanders near the unit. While the actual fuel cells operate at high temperatures, these components do not move and are contained within many layers of insulation. During normal operation, the unit is cool to touch and operates quietly. The fuel cell system is controlled electronically and has internal sensors that continuously measure system operation. If safety circuits detect a condition outside normal operating parameters, the fuel supply is stopped, and individual system components are automatically shut down. An operator at the manufacturer's remote monitoring and control center can also initiate any emergency sequence. An emergency stop alarm condition initiates an automatic shutdown sequence that puts the fuel cell system into safe mode and causes it to stop exporting power.

Additional technical details and safety features are included in the manufacturer's *Energy Server® Customer Manual* and *Fire Prevention and Emergency Planning – Grid Parallel* documents provided in **Appendix B**.

### B(9)(b) Electric and Magnetic Fields

**For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line, describe:**

**(i) Calculated electric and magnetic field strength levels at one meter above ground under the lowest conductors and at the edge of the right-of-way for:**

**(a) Normal maximum loading.**

**(b) Emergency line loading.**

**(c) Winter normal conductor rating.**

**(ii) The applicant's consideration of design alternatives with respect to electric and magnetic fields and their strength levels, including alternate conductor configuration and phasing, tower height, corridor location, and right-of-way width.**

The Project does not include a proposed electric power transmission line, and no occupied residences or institutions are located within 100 feet of the Project. This section is not applicable.

### B(9)(c) Project Cost

**The estimated capital cost of the project.**

The cost estimate for the proposed Project will be fully recovered from Amazon Data Services ("ADS"). Consistent with Ohio Revised Code 4928.47, an agreement approved by the Commission in Case No. 25-0133-EL-AEC is structured to reduce the impact to other customers by requiring ADS to

pay all direct and indirect costs, including costs for infrastructure development or generation, associated with the customer-sited renewable energy resource that is the subject of this LON.

**B(10) Social and Ecological Impacts**

**The applicant shall describe the social and ecological impacts of the project.**

**B(10)(a) Land Use**

**Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.**

The Project is located within the City of Hilliard, Franklin County, Ohio. The Project area is within an existing industrial facility being developed and owned by the customer. Other portions of the customer's facility are adjacent to the north and west with a Company-owned electrical substation to the east. Scioto Darby Creek Road is adjacent to the south followed by a railroad spur and an industrial warehouse.

**B(10)(b) Agricultural Land**

**Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.**

The Project area is developed with the customer's existing industrial facility. No agricultural land is within the potential disturbance area of the Project.

Based on data received from the Franklin County Auditor's Office on May 9, 2025, there are no agricultural district parcels in the Project area. No Ohio Department of Agriculture easements are within the potential disturbance area of the Project.

**B(10)(c) Archaeological and Cultural Resources**

**Provide a description of the applicant's investigation concerning the presence or absence of significant archaeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

A Phase I cultural resource survey and report for a larger area that included the Project area were conducted by the customer's consultant for the Project in 2022 and provided to the Ohio State Historic Preservation Office ("SHPO") for consultation. No cultural resources were identified within the Project area. Correspondence from the SHPO was received on January 25, 2023, *see* **Appendix C**. The SHPO stated that the Project will have no effect on any historic properties and that no further archaeological work is necessary.

### B(10)(d) Local, State, and Federal Agency Correspondence

**Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.**

A summary of anticipated permits and authorizations for the Project is provided in **Table 2**, below. There are no other known local, state, or federal requirements that must be met prior to commencement of the Project.

**Table 2 – Anticipated Permits**

| Permit/Authorization/Coordination | Agency | Date |
|---|---|---|
| Storm Water Pollution Prevention Plan | Ohio Environmental Protection Agency | Not Applicable |
| | Licking County | |
| Notice Criteria | Federal Aviation Administration | Submitted through Criteria Tool on 6/12/2024, no further action required |
| Clean Water Act Section 404/401 | United States Army Corps of Engineers | Wetland impacts in the vicinity of the Project and beyond on the overall customer property were permitted by others. There are no impacts to streams or wetlands associated with the Project. |
| | Ohio Environmental Protection Agency | |
| Archaeology/Architectural | Ohio Historic Preservation Office | Coordination complete 1/25/2023, no additional work required |
| Threatened and Endangered Species | United States Fish and Wildlife Service | Consultation complete 1/6/2022 |
| Threatened and Endangered Species | Ohio Department of Natural Resources | Consultation complete 1/21/2022 |
| Floodplain | City of Hilliard | Not Applicable |

### B(10)(e) Threatened, Endangered, and Rare Species

**Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

Coordination letters were submitted by the customer's consultant to the United States Fish and Wildlife Service ("USFWS") and the Ohio Department of Natural Resources ("ODNR") Ohio Natural Heritage Program ("ONHP") and Division of Wildlife ("DOW"), seeking an environmental review of the Project for potential impacts to state and/or federally protected species. ODNR and USFWS provided responses on January 21, 2022 and January 6, 2022, respectively. Copies of the agencies' responses are presented in **Appendix C**.

**Appendix D** lists the federal and state threatened or endangered species identified by USFWS and ODNR with the potential to inhabit the Project area.

The Project work areas are part of a large property under development. The area is completely disturbed, with no trees or other habitat for the listed species present. Based on the nature of the proposed Project activities and habitat characteristics of the surrounding vicinity, construction impacts to protected species are not anticipated.

### B(10)(f) Areas of Ecological Concern

**Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

The customer's consultant conducted a wetland and stream delineation survey of the overall customer property in 2020. One wetland (Wetland B) and an upland swale were delineated within the Project footprint. An isolated wetland permit application was submitted to the Ohio Environmental Protection Agency ("OEPA") in 2022, and the corresponding Level Three Isolated Wetland Permit was granted in January 2023. The permit is provided in **Appendix E**. A subsequent 2024 Annual Update Report provided to OEPA by the customer indicated that Wetland B was filled as permitted in September 2023. The annual report is provided in **Appendix F**. The Project work areas have been fully disturbed and will result in no further impacts to streams, wetlands, or other water bodies.

Based on a review of the Protected Areas Database of the United States as well as the Conservation Easement Database, there are no state or national parks, forests, wildlife areas, mapped conservation easements, or other areas of ecological concern in the vicinity of the Project.

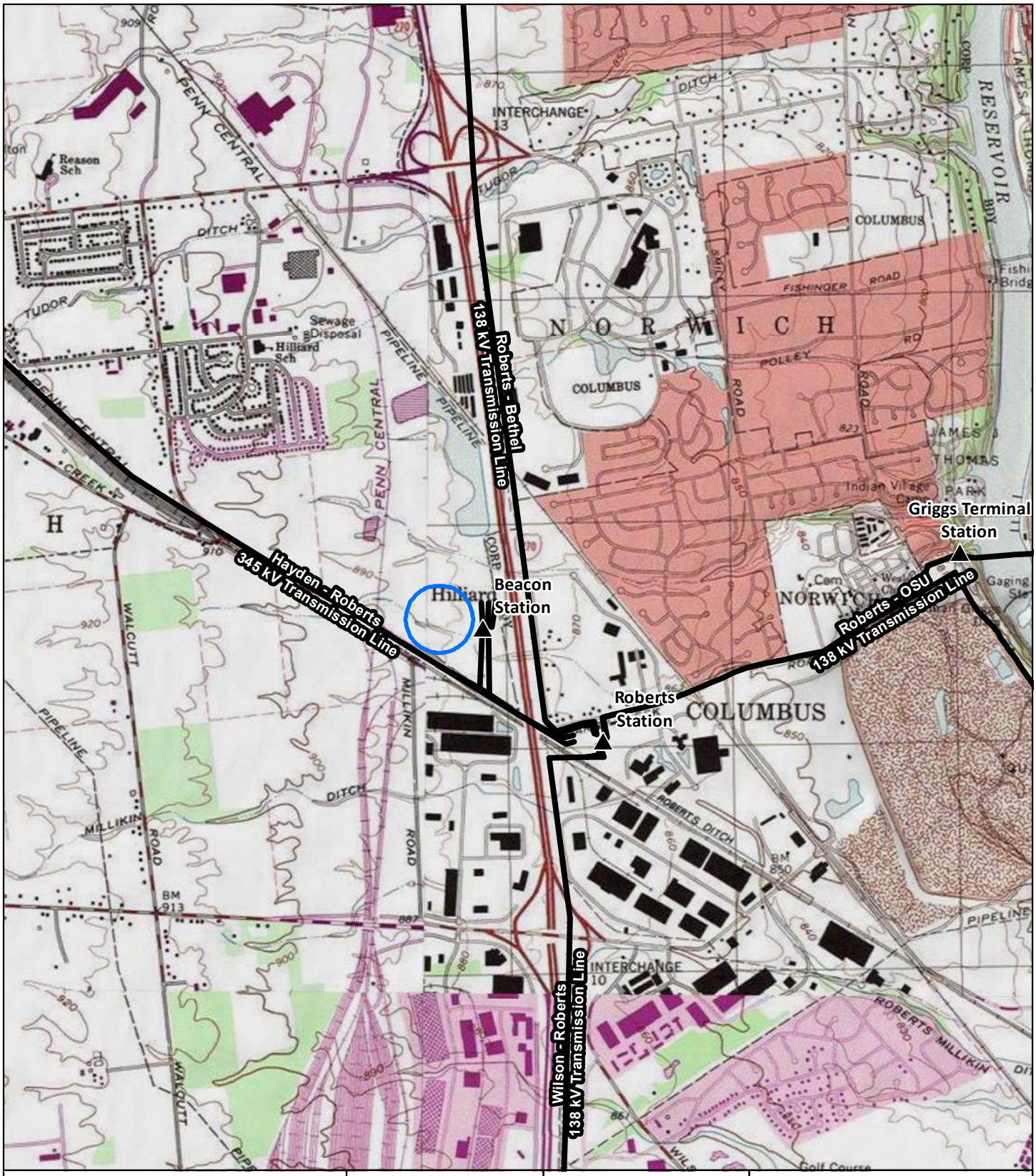
The Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") was reviewed to identify any floodplains/flood hazard areas that have been mapped within the Project area (specifically, Map No. 39049C0163K). Based on this mapping, the Project work areas are not located within FEMA-designated 100-year floodplains or floodways.

### B(10)(g) Unusual Conditions

**Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.**

To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

# Appendix A  Project Maps




Legend:

- Project Area
- Existing Transmission Line
- Existing Station

Data Sources: AEP, USGS 7.5' Topographic Quadrangle (Hilliard, Ohio and Northwest, Ohio)

Ohio State Plane South NAD 1983

June 07, 2025

PROJECT LOCATION


FRANKLIN COUNTY, OHIO

# FIGURE 1
# TOPOGRAPHIC OVERVIEW

AEP OHIO

**Scioto Darby Creek Road Fuel Cell System**

0 1,000 2,000 3,000

Feet


Legend:

- Fuel Cell System Installation Boundary
- Parcel Boundary
- Approximate Natural Gas Pipeline (To be Submited by Others, if required)
- Natural Gas Utility Pad (To be Submitted by Others, if required)

Data Sources: AEP, Franklin County Imagery (2023)

Ohio State Plane South
NAD 1983

June 17, 2025

PROJECT LOCATION


FRANKLIN COUNTY, OHIO

# FIGURE 2
# PROJECT AERIAL MAP

AEP OHIO
An AEP Company

**Scioto Darby Creek Road**
**Fuel Cell System**

0 150 300 450
Feet

# Appendix B Manufacturer's Technical and Safety Information

# Energy Server® Customer Manual

This manual applies to all Energy Server 5 (ES5) models.

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**(408) 543-1678 / 9**

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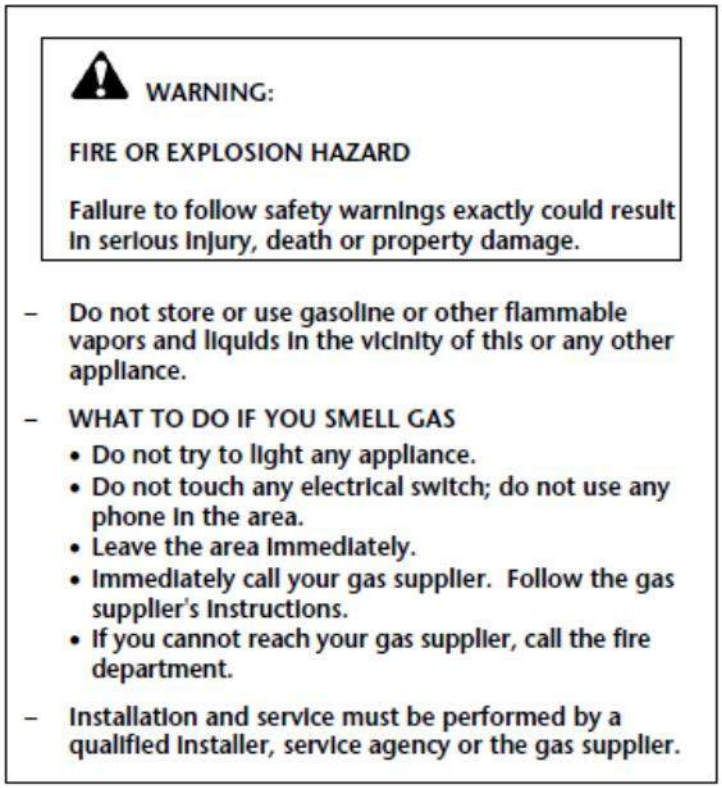
# General Safety for Fuel Cell Systems

## 1 Facility Safety



**WARNING:**

**FIRE OR EXPLOSION HAZARD**

**Failure to follow safety warnings exactly could result in serious injury, death or property damage.**

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS**
  - **Do not try to light any appliance.**
  - **Do not touch any electrical switch; do not use any phone in the area.**
  - **Leave the area immediately.**
  - **Immediately call your gas supplier. Follow the gas supplier's instructions.**
  - **If you cannot reach your gas supplier, call the fire department.**
- **Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

**For safe maintenance of the system, the following safety rules must be observed:**

1. You must notify Bloom if you are planning any work at the site that affects **water**, **power**, **internet,** or **gas** to the Energy Server. These elements affect the performance of the fuel cell and lack of notification may cause irreversible damage to the modules.
2. Only Bloom Energy-approved Field Service providers are permitted access to the inside of the system enclosure.
3. Keep the equipment free of surrounding debris. No boxes, crates, vehicles, etc. should be present within 7 feet of the Energy Server in any direction.
4. Field Service providers will periodically clean the equipment; if you wish to clean your system, do not spray with a pressurized hose.
5. Check local fire marshal requirements for code requiring an ABC-type fire extinguisher, well-marked, within sight of the system.
6. Obey all applicable local, state, and national codes and regulations.



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7. The area around the Energy Server must be kept clear and free of combustible materials, gasoline, and other flammable vapors and liquids.
8. Do not block or obstruct air openings on the equipment or the surrounding 7 feet around the Energy Server that provides clearances to secure and discharge required air. This equipment requires air flow in order to operate.
9. Do not use this equipment if any part has been under water. Flood-damaged equipment is potentially dangerous. Attempts to use it can result in fire or explosion. A qualified service agency should be contacted to inspect the site and to replace all gas controls, control system parts, and electrical parts that have been wet.

For any non-emergency inquiries, please contact us:

CustomerCare@bloomenergy.com

Please contact Bloom Energy's **Remote Monitoring Control Center (RMCC) at (408) 543-1678 / 9** no less than 24 hours prior to any work which will be performed onsite which may affect your Energy Server including but not limited to power supply outages or surges and/or interruption of gas supply, water supply, and/or internet connection. Bloom operators can assess the situation and take the necessary actions to mitigate impact on the fuel cells during work and enable them come back online smoothly and efficiently when work is completed.

**Failure to notify RMCC may cause an invalidation of warranty on the Energy Servers and interruption of service to your site.**

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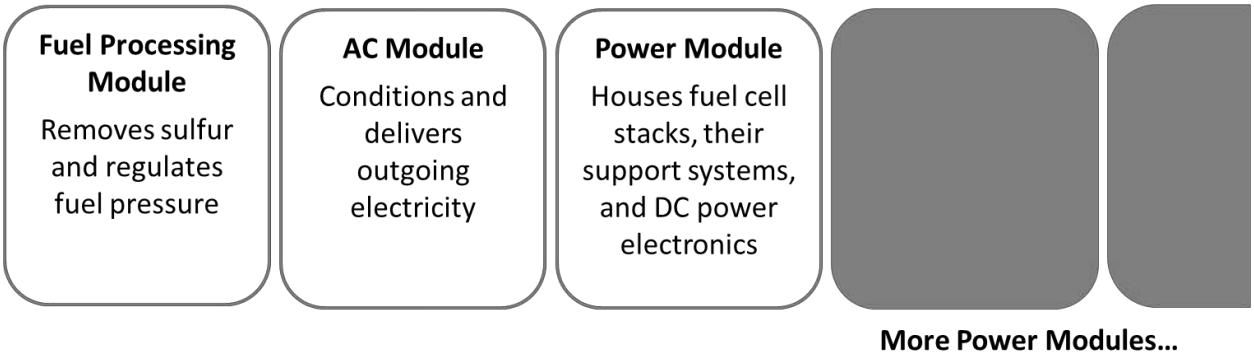
# 2 System Modules and Functions

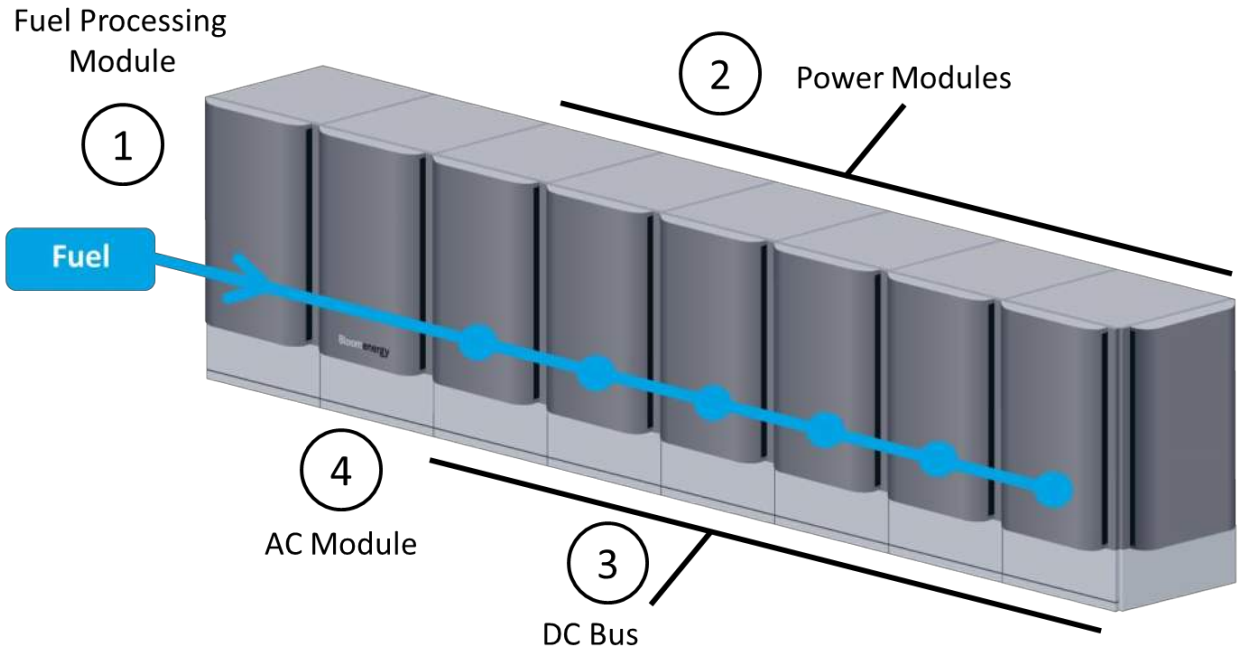
Each Energy Server has three types of modules: one Fuel Processing Module, one AC Module and several identical Power Modules.

**Figure 1 – System Modules**




The function of each module can be understood by tracing the fuel through its conversion to electricity (see below).

**Figure 2 – Fuel Cell Inputs and Outputs**



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1. Fuel from the facility enters the Energy Server at the Fuel Processing Module. This module regulates fuel pressure and removes trace components, such as sulfur, which can harm the fuel cells.
2. Once processed, the fuel flows to each of the Power Modules. Each Power Module contains stacks of fuel cells, the necessary support components for handling air, heat, water, exhaust, monitoring, and safety, and DC power electronics. Processed fuel enters the fuel cell, reacts with $O_2$ (from ambient air), and is electrochemically converted into DC electricity.
3. The ensuing DC power is collected by the DC bus and fed to the AC Module.
4. The AC Module converts the DC power to AC power and exports the power to the facility.

This modular architecture allows for maximum availability and power production. If any part of a Power Module needs to be replaced or repaired, the remaining Power Modules can remain operational during service.

Additionally, Energy Server 5 is capable of being installed in a number of different configurations: linear (shown in Figures 1 and 2), compact, and corner.

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**Table 2 – System Design Specifications**

| | |
|---|---|
| **Inputs** | |
| Fuels | Natural gas, directed biogas |
| Input fuel pressure | 10-18 psig (15 psig nominal) |
| Water (connection required at all times) | None during normal operation |
| **Outputs** | |
| Electrical connection | 480 V, 3-phase, 60 Hz |
| **Efficiency** | |
| Cumulative electrical efficiency (LHV net AC)* | 65-53% |
| Heat rate (HHV) | 5,811-7,127 Btu/kWh |
| **Emissions** | |
| NOx | 0.0017 lbs/MWh |
| SOx | Negligible |
| CO | 0.034 lbs/MWh |
| VOCs | 0.0159 lbs/MWh |
| CO2 @ specified efficiency | 679-833 lbs/MWh on natural gas; carbon neutral on directed biogas |
| **Physical Attributes and Environment** | |
| Temperature range | -20° to 45° C |
| Humidity | 0% - 100% |
| Seismic vibration | IBC site class D |
| Location | Outdoor |
| Noise | < 70 dBA @ 6 feet |
| **Codes and Standards** | |
| Complies with Rule 21 interconnection and IEEE1547 standards | |
| Exempt from CA Air District permitting; meets stringent CARB 2007 emissions standards | |
| An Energy Server is a Stationary Fuel Cell Power System. It is Listed by Underwriters Laboratories, Inc. (UL) as a 'Stationary Fuel Cell Power System' to ANSI/CSA FC1-2014 under UL Category IRGZ and UL File Number MH45102. | |
| **Additional Notes** | |
| Access to a secure website to monitor system performance & environmental benefits | |
| Remotely managed and monitored by Bloom Energy | |
| Capable of emergency stop based on input from the site | |

* 65% LHV efficiency verified by ASME PTC 50 Fuel Cell Power Systems Performance Test



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# 3 External Modules and Ancillary Equipment

## 3.1 Water Distribution Module

The Water Distribution Module (WDM) is responsible for purifying water from the utility to a level required for optimal function of the fuel cells. The module takes water from the facility, purifies it using a pair of de-ionization beds, and delivers the purified water to the Energy Server. The WDM is installed on the ancillary pad with the PDS and Telemetry cabinet.

## 3.2 Power Distribution System / Electrical Distribution Module

The Power Distribution System (PDS) or Electrical Distribution Module (EDM) houses the electrical power connections from the facility, surge protection device, and any required power meters. The PDS is installed on an ancillary pad along with the WDM.

## 3.3 Telemetry Cabinet

The Telemetry Cabinet houses the communications components that allow Bloom Energy's Remote Monitoring Control Center (RMCC) to constantly monitor the Energy Servers. All reported data from the systems is continuously transmitted to live operators and recorded in our database for data analysis and predictive action. The RMCC operators will communicate any alarms to Field Service personnel if onsite action is required.

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# 4 Safety Features

Every Energy Server has redundant safety features and in-system checks to ensure personnel safety. While the actual fuel cells operate at high temperatures, these components do not move and are contained within many layers of insulation. It is safe to stand adjacent to the equipment as all moving parts and hot surfaces are protected by the outer panels. However, do not attempt to open the doors of the Energy Server or climb on top of it. Parts of the Energy Server, including the exhaust vents at the peak of the roof, are hot during operation. Also, as with any device using flammable fuel, never smoke or create sparks near the equipment.

Bloom Energy Servers are controlled remotely and have internal sensors that continuously monitor system operation. If safety circuits detect a condition outside normal operating parameters, the fuel supply is stopped and individual system components are automatically shut down. A Bloom Energy RMCC operator can also remotely initiate any emergency sequence. An Emergency Stop alarm initiates an automatic shutdown sequence that puts the system into "safe mode" and causes it to stop exporting power. If a full shutdown is warranted, the system can return to ambient temperature within 18 hours. If you have questions about any of these safety features, please contact Bloom Energy at CustomerCare@bloomenergy.com.

- **Manual controls:**
  - A clearly marked Emergency Power Off button located at site to stop the export of power
  - Manual gas valve located within 50 feet of Energy Server location to control gas inflow
- **Fire hazard mitigation:**
  - Energy Server is plumbed directly to utility-provided natural gas
  - If input gas pressure is compromised, an internal pressure switch triggers an emergency system shutdown and fuel input is isolated through double solenoid isolation valves
  - Equipment contains virtually no stored fuel (internal capacity is < 5 scf)
- **Electrical hazard and mitigation:**
  - System operates at 480 $V_{AC}$
  - System inverter prevents backfeed to the grid during a power outage
- **Mechanical hazards and mitigation:**
  - All moving parts are located behind secured doors
- **Hazardous material mitigation:**
  - Desulfurizer beds (to remove fuel impurities) are fully enclosed and are only serviced by licensed vendors



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# 5 Emergency Procedures

**Table 3 – Emergency Actions**

<table>
<tr><th colspan="3">Emergency Procedures</th></tr>
<tr><th>Scenario</th><th>You</th><th>Bloom Energy</th></tr>
<tr><td>System Fire</td><td>1. Ensure personal safety<br>2. Call 911 and Bloom Energy RMCC<br>3. Hit Emergency Power Off button<br>4. Shut gas isolation valve<br>5. Open electrical disconnect</td><td rowspan="3">1. Remote shutdown<br>2. Dispatch Field Service team (if safe and necessary)<br>3. Notify your site contact</td></tr>
<tr><td>Fire in System Vicinity</td><td rowspan="2">1. Ensure personal safety<br>2. Call Bloom Energy RMCC</td></tr>
<tr><td>Natural Gas Leak</td></tr>
<tr><td>Major Seismic Event</td><td>1. Ensure personal safety<br>2. Call Bloom Energy RMCC<br>3. Cut off fuel and electricity (if absolutely necessary)</td><td></td></tr>
</table>

If you have to shut down your system right away—for example, in case of a building fire or electrical hazard—three shutoff controls are installed at your facility external to the system. The locations of these three controls should be known to your facilities manager before operation and should be noted on the site diagram that you created with your Bloom Energy account manager. The three shutoffs are: (1) **EPO button**, (2) the **electrical disconnect switch**, and (3) the **manual natural gas shutoff valve**.

1. The **Emergency Power Off (EPO) button** (see below) opens each Energy Server's output contactor to stop sending power to the facility. All natural gas flow is also stopped, as cutting power closes two fail-closed natural gas valves inside the system. The EPO button is located on the side of the Telemetry Cabinet. It has a protective plastic cover on it, as well as protective glass that must be broken with its attached hammer before pressing the button. Use this if you want to stop exporting power in the case of an emergency.

**Figure 3 – Telemetry Cabinet & EPO Button**



FOR ANY EMERGENCY OR SHUTDOWN NOTIFICATION, PLEASE CONTACT
**THE REMOTE MONITORING CONTROL CENTER**
**(408) 543-1678 / 9**

2. The **manual natural gas valve** shuts off all natural gas at a point upstream of the Energy Server. Removing the gas source will completely shut down the Energy Server. If the valve handle is perpendicular to the pipe, the valve is shut. If the valve handle is parallel with the pipe (as shown below), the valve is open.

**Figure 4 – Manual Natural Gas Valve**


| | |
|---|---|
| **Note** | **Some gas shutoff valves are installed without a permanent handle to prevent unauthorized operation. Use an adjustable wrench to operate a valve without a handle.** |

3. The **electrical disconnect switch** manually disconnects power to everything downstream of it. The disconnect switch is typically located near the point where the wires from the Energy Server installation meet the facility's electrical framework. This might be next to the Energy Server or in the site's facility room. The location is shown on your site map. The switch is labeled "[Name of Electrical Utility] Lockable Visible Generator Disconnect Switch." Use this if you need to cut power in the line to the EDM/PDS, the EDM/PDS itself, and the electrical connection leading to the Energy Server (see section *External Modules* for further definitions). Note that opening the electrical disconnect switch places the Energy Server in a Balance of Plant (BOP) state where it does not export power but is still processing fuel. Operating the electrical disconnect should be done to electrically isolate the system, but not to shut it down completely.



FOR ANY EMERGENCY OR SHUTDOWN NOTIFICATION, PLEASE CONTACT
**THE REMOTE MONITORING CONTROL CENTER**
**(408) 543-1678 / 9**

**Figure 5 – Electrical Disconnect Switch**


Each site is designed for International Code Council (ICC) Seismic Site Class D. Seismic Zone 4 may also be mentioned for older building codes. Seismic Site Class D is equivalent to Seismic Zone 4 and 1 G lateral acceleration for our design calculations.

*[THE REST OF THIS PAGE INTENTIONALLY LEFT BLANK]*

# 6 About Bloom Energy


Bloom Energy has developed a revolutionary onsite power generation system called an "Energy Server®" based on a proprietary fuel cell technology that provides a more reliable, cleaner and cost effective alternative to the traditional electric power grid and does so 24 hours a day, 7 days a week and 365 days a year. Bloom Energy Servers generate electricity through a highly efficient electrochemical process that combines fuel (natural gas or biogas) and ambient air to create electricity. Compared to the grid, Bloom Energy Servers deliver Better Electrons™ for multiple reasons. First, the fuel that enters the fuel cells is converted into electricity through an electrochemical reaction that does not require combustion or multiple phase changes (chemical, thermal, mechanical etc.). Secondly, this highly efficient process results in dramatically lower emissions. Bloom customers can reduce $CO_2$ emissions by 50%-100% compared to the U.S. grid (depending on fuel choice) and virtually eliminate $SO_x$, $NO_x$ and other criteria pollutants. In addition, the energy is produced right next to the facility's load instead of being transmitted over power lines, thus avoiding line losses. The end result is that Bloom customers benefit from reliable power that is onsite, under their control, and cleaner than power provided by the traditional electric grid.

# 7 Fuel Cell Technology

Bloom Energy's core technology is a solid oxide fuel cell (SOFC). Unlike conventional energy generation technologies, fuel cells do not combust fuel. Fuel cells use an electrochemical process (similar to a battery) to convert fuel directly into electricity, thus emitting far fewer smog-forming air pollutants and harmful emissions. Also, since a fuel cell has no moving parts, it can operate quietly, reliably and efficiently.

Layers of materials with distinct electrochemical properties are sandwiched together to form the fundamental building block of a fuel cell. At the heart of each cell lies an electrolyte that can only be crossed by charged molecules. On either side of the electrolyte, electrodes (the anode and the cathode) are connected to a load to create an electrical circuit. Fuel flows across the anode and air flows across the cathode, thereby driving a continuous reaction. The fuel cells are stacked into columns to form Power Modules which are grouped together to form Bloom Energy Servers.



FOR ANY EMERGENCY OR SHUTDOWN NOTIFICATION, PLEASE CONTACT
**THE REMOTE MONITORING CONTROL CENTER**
**(408) 543-1678 / 9**

# 8 Bloomconnect® Portal

Bloomconnect is an online performance dashboard for Bloom Energy Server installations that tracks energy output and sustainability benefits. The dashboard interface is populated with data from each Energy Server 24 hours a day, 7 days a week. This data can be viewed on Bloomconnect from any web-enabled device, allowing for quick and easy access. The user-friendly web-based interface provides you with insightful and engaging graphs and animations that illustrate the benefits of deploying your Energy Servers. Bloomconnect helps to link the environmental benefits to the everyday operation of your facilities.

**Figure 6 – Bloomconnect Web Page**


Using Bloomconnect, you can:

- Plot and review your daily electrical generation
- Graphically display performance metrics across customizable timescales
- Calculate your lifetime carbon reduction
- Utilize an interactive map to view different installation locations

## 8.1 Environmental Benefits

Bloomconnect quantifies carbon and water savings and communicates these benefits in everyday terms and offset equivalencies (cars removed for 1 year, pounds of coal not burned, etc.).

All $CO_2$ reduction metrics are a comparison between the Energy Server's emissions and those of the electrical power grid of the state in which the site is located. The methodology for these calculations can be found on the U.S. EPA website (http://www.epa.gov/cleanenergy/energy-resources/calculator.html).

Water savings are calculated by comparing the average Bloom Energy Server's water intake (240 gallons at initial start-up per Energy Server) to the average water intake per MWh of an average U.S. coal plant.

### 8.2 Accessing Your Web Page

Access the monitoring web page at: https://portal.bloomenergy.com/

Upon site start-up, a representative from the Customer Care team will email your organization's primary contact asking for a list of preferred users. Once this list is received by Bloom, each user will receive an email with login information within two business days.

| | |
|---|---|
| **Legal Note** | **Bloomconnect access is intended for your organization's users *only*. Do not distribute your user name and/or password under any circumstances to anyone. If you are interested in displaying the portal on a kiosk monitor, please contact CustomerCare@bloomenergy.com.** |

For best results, please access Bloomconnect using the latest versions of Google Chrome, Mozilla Firefox, or Internet Explorer (version 9.0 or higher).

### 8.3 What To Do If You Lose Your Password

If you forget your account password, select "Forgot Password?" on the login screen. At the next screen, enter your username or email address (must be same as one Bloom used to create the login) and click "Reset Password." A new password will be sent to your email address within a few minutes. If you continue to have issues, please email CustomerCare@bloomenergy.com.

## 9 Bloom Energy Contact Information

For any non-emergency inquiries, please contact us:

**CustomerCare@bloomenergy.com**

Please call the Remote Monitoring Control Center if:

1. You are aware of an event that will occur at your site, such as a planned power/water/internet/gas outage, fire drill, construction, etc.
2. You have had any emergency at your site, such as an earthquake, fire or fuel line rupture.

# *Fire Prevention and Emergency Planning – Grid Parallel*

Bloom Energy Corporation, 1299 Orleans Drive, Sunnyvale, CA 94089 USA

## Table of Contents

# 1. FIRE PREVENTION AND EMERGENCY PLANNING OVERVIEW

The following document is provided only as a guide to assist you in complying with national and local codes and requirements, as well as to provide other helpful information. It is not intended to supersede the requirements of any standard. You should review the standards for particular requirements that are applicable to your individual situation, and make adjustments to this program that are specific to your company. You will need to add information relevant to your facility in order to develop an effective, comprehensive program.

# 2. FUEL CELL SYSTEM INSTALLATION SAFETY FEATURES

The fuel cell system has redundant safety features and in-system checks to ensure that the system will not harm certified technicians or bystanders near the unit. While the actual fuel cells operate at high temperatures, these components do not move, and are contained within many layers of insulation. During normal operation, the unit is cool to the touch and operates quietly.

The fuel cell system is controlled electronically and has internal sensors that continuously measure system operation. If safety circuits detect a condition outside normal operating parameters, the fuel supply is stopped and individual system components are automatically shut down. A Bloom Energy Remote Monitoring and Control Center (RMCC) operator can also remotely initiate any emergency sequence. An Emergency Stop alarm condition initiates an automatic shutdown sequence that puts the fuel cell system into —safe modell and causes it to stop exporting power. If you have questions about any of these safety features, please contact Bloom Energy.

**If you have to shut down your fuel cell system right away**—for example, in case of a building fire or electrical hazard—three shutoff controls are installed at your facility external to the system. The locations of these three controls should be known to your facilities manager before operation, and should be noted on your facility diagram that you created with your Bloom Energy account manager. The three shutoffs are the **EPO button**, the **electrical disconnect**, and the **natural gas shutoff valve**.

- An **Emergency Power Off (EPO) Button** cuts all power to all systems and stops them from exporting power to your building. All natural gas flow is also stopped within the systems. (The EPO button is on the front/side of the EDM, if an EDM is installed.) Lift the protective cover and break the glass seal that covers the button with the attached hammer. After the glass seal is broken, the shutdown sequence will automatically begin.

Figure 1: Emergency Power Off Button

- An **electrical disconnect** manually disconnects systems from the grid if needed. Pressing the EPO button should already stop any power transmission, but it does not hurt the systems to also open this disconnect if you believe it is needed. The location of this disconnect will vary, however it is typically located near the point of interconnection where the wires from the fuel cell installation meet the facility's electrical framework. This may be inside your facility's electrical room, or if the fuel cell installation is near the electrical room, it may be found within the switchgear that Bloom Energy installs. This location of this disconnect is shown on the Site Map (see below) and is labeled "(name of electrical utility) Lockable Visible Generator Disconnect Switch".


Figure 2: Electrical Disconnect

- A **manual natural gas valve** shuts down all natural gas to the system. If the valve operator is perpendicular to the pipe, the valve is shut. If it is parallel with the pipe, the valve is open.

Figure 3: Manual Natural Gas Valve

**Site map:**

- An overhead site map showing the location of all safety features will be posted throughout the fuel cell installation
- Electronic copies are available to you for use in your site planning

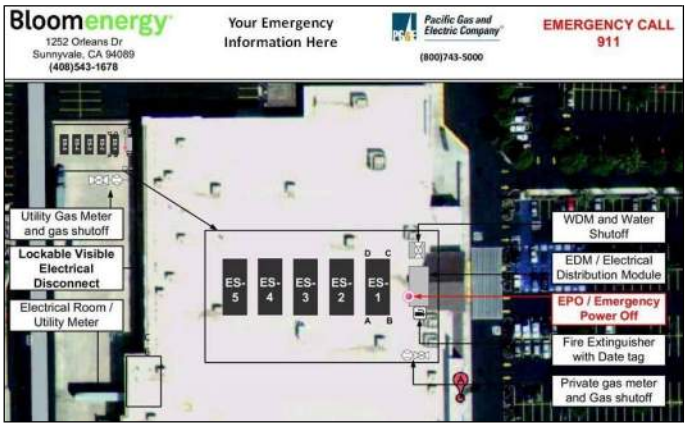

Figure 4: Sample Site Map

**Manual controls:**

- Clearly marked emergency stop button labeled —Fuel Cell Emergency Shut Downll located at site
- Two manual fuel shutoff valves outside the system, and two isolation valves inside the system

**Fire hazard mitigation:**

- System is plumbed directly to utility-provided natural gas
- If system input gas pressure is compromised, a pressure switch triggers an emergency system shutdown and fuel input is isolated
- System does not use fuel compressors or pumps
- System has virtually no stored fuel (internal capacity is < 5 scf)

**Electrical hazard and mitigation:**

- System operates at 480V
- Signs inside the system warn of the risk of electric shock
- System has backfeed protection
- System inverter prevents grid backfeed during a power outage

**Mechanical hazard and mitigation:**

- Finger/hand guard protection is provided on all fans
- All moving parts are located behind secured doors

**Material hazard mitigation:**

- Desulfurizer bed (to remove fuel impurities) are fully enclosed
- Maintained and serviced by licensed vendors

## 3. EMERGENCY NOTIFICATION PROCEDURES

**Life-Threatening Emergencies**

To report life-threatening emergencies, immediately call:

| | |
|---|---|
| **Fire:** | **911** |
| **Ambulance:** | **911** |
| **Police:** | **911** |

Conditions that require automatic emergency notification include:

- Unconscious Victim
- Seizure
- Major Trauma
- Chest Pains
- Difficulty Breathing
- Flames

**Non-Life-Threatening Emergencies**

For non-life-threatening emergencies, report the incident to the local safety control center.

When you report an emergency, give the following information:

- Exact nature of the emergency (describe as clearly and accurately as possible).
- Exact location (i.e., address, building, floor, area, department, etc.).
- Telephone number from which you are calling.
- Your full name.
- ***Do not hang up***, as additional information may be needed.

To assist in any subsequent investigation or determination of corrective actions, it is recommended to record the following items as close to the incident time as possible:

- Summary of any violation

- Identification of responsible parties
- Identification of victims and witnesses
- Description of evidence
- Description of general conditions
- Description of any vehicles involved
- Narratives from witnesses
- Any photographs

## 4. FIRE OR SMOKE PROCEDURES

This section describes the procedures involving a fire or smoke. A major fire is one that requires the use of more than one fire extinguisher or takes more than one minute to extinguish.

If you discover a fire or smoke:

1. Activate the nearest fire alarm if not activated already.
2. Activate the fuel cell Emergency Stop if possible.
3. Shut off the fuel cell installation natural gas line if possible.
4. If the fire is small and does not pose an immediate risk to personal safety, you may attempt to extinguish it with a portable fire extinguisher **only if trained to do so.**
5. Avoid using water on electrical fires.
6. Report every fire, regardless of size, immediately. Smoke or the smell of smoke should be reported.
   - From a safe location dial **911**.
   - Report the incident to the local security safety center.

## 5. MEDICAL EMERGENCY PROCEDURES

This section describes the necessary procedures for injuries or illnesses that may occur under extreme conditions.

A serious injury can be life-threatening and will require immediate medical attention. Injuries can include head injuries, spine injuries, broken bones, heart attack, stroke, loss of consciousness, excessive bleeding, chemical exposure, etc.

A non-serious injury is not immediately life-threatening but may still require the attention of a medical doctor. These can include headaches, nausea, itching, cuts, burns, etc.

**Life-Threatening Medical Emergency**

1. Remain calm.
2. Immediately dial 911.
3. Report the incident to local security safety center.
4. Do not move the victim unless it is absolutely necessary.
5. Call out for personnel trained in first aid and/or CPR which may include Building Evacuation or Emergency Response team members.

6. Ask someone to bring the area first aid kit and Automated External Defibrillator.
7. Assist if capable or asked to do so.

**Non-Life-Threatening Medical Emergency**

1. Remain calm.
2. Report the incident to the local security safety center.
3. Do not move the victim unless it is absolutely necessary.
4. Call out for personnel trained in first aid.
5. Ask someone to bring the area first aid kit.
6. If the victim requires further medical attention, then direct them to the nearest approved medical clinic or hospital – Contact Security or Human Resources for assistance if needed.
7. The injured employee's supervisor/manager is responsible for ensuring injury forms are properly filled out. Complete the forms within 24 hours of incident and submit to the injury reporting system for follow-up. Follow company protocols.

## 6. MATERIALS RELEASE PROCEDURES

The fuel cell system does not pose a hazard to health or environment. However, some internal materials when released, may pose a irritation risk to people and a possible risk of fire if not properly handled. This section was designed to address potential material release events:

In case of a material release that poses a direct threat to health, safety, or the environment:

1. Report the incident to local safety/security office.
2. If extremely life-threatening immediately dial **911** followed with a call to Security.
3. Contain the spill.
4. Evacuate the area or building if the material release is determined to be life-threatening.

In the event of an unknown indoor smell or odor, report the incident to authorities responsible for HAZMAT and spills.

## 7. NATURAL DISASTERS AND SEVERE WEATHER

### 7.1 Earthquake

This section provides information and procedures for earthquake emergencies.

The fuel cell system is designed to automatically shut off if the natural gas supply is compromised.

The natural gas supply line has an external, manual shut-off valve that should be activated if it is safe to do so. This valve will be labeled, "Notice – Fuel Cell Gas Shut

Off". The natural gas line will be labeled with the word "gas" on a yellow background with an arrow pointing in the direction of flow.

The nearby Emergency Stop can be activated to stop the flow of fuel and power to/from the fuel cell system.

A Bloom Energy Field Engineer will validate site safety and system operation during/after severe weather as necessary.

### 7.2 Flood

The fuel cell system support pad is designed to divert water flow. However, if flooding conditions exist, or threaten to exist due to heavy rainfall, creek bank overflows, or pipe breakage, then immediately report the incident to the local safety/security office.

Do not use the fuel cell power system if any part has been under water. If it is safe to reach the Emergency Power Off button for the site without entering the water, stop all systems until a Bloom Energy representative can assess the site.

Precautions to follow after a flood:

- Stay out of flooded areas. Flooded areas remain unsafe. Entering a flooded area places you at risk.
- Notify Bloom Energy. A Bloom Energy Field Engineer will validate site safety and system operation during/after severe weather as necessary

## 8. UTILITY OUTAGE

The fuel cell system is operated in "Grid-Parallel" mode. If utility provided power is lost for any reason, the fuel cell system will go "off-line". The fuel cell system will remain in stand-by mode until it automatically senses the utility grid has been restored. If utility gas is shut down, the fuel cell system will begin to shut down completely.

The Bloom Energy Remote Monitoring Control Centers monitor the fuel cells 24 hours per day and will be alerted to utility grid interruptions via its controls software. A Field Service Engineer will be dispatched to restart the fuel cell system if necessary. Customer personnel should NOT attempt to start up or operate the fuel cell system.

**Before a Planned Outage**

- Notify the Bloom Energy Remote Monitoring Control Center at 1-408-543-1678 at least 24 hours before planned outage.
- Bloom Energy Remote Monitoring Engineers will reduce power generated by the fuel cell system and take the fuel cell off-line.
- Abrupt fuel cell system shutdowns may cause significant system damage.

**During a Utility Power Loss**

- The fuel cell system will automatically go off-line.
- The Bloom Energy Remote Monitoring Control Centers will monitor the fuel cell system.
- Bloom Energy Field Service will be dispatched to start up the fuel cell system as necessary.
- If the fuel cell system has been automatically shut down and utility power is restored, there will be no impact to building power delivery: primary power will come from the utility rather than the fuel cells.

# 9. GOOD HOUSEKEEPING AND MAINTENANCE

## 9.1 Good Housekeeping

Although extremely unlikely, to minimize the risk of fire and any incidents, Facility Managers should take the following precautions around the fuel cell installation:

- What to do if you smell gas:
  - Do not try to light any appliance
  - Do not touch any electrical switch; do not use any phone in the area
  - Leave the area immediately
  - Immediately call your gas supplier. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department

- Notify Bloom Energy Remote Monitoring Control Center at 1-408-543-1678 of any condition that would impair the safety of the fuel cell installation so that mitigation measures could be determined and placed into effect.
- Prohibit smoking within the area of the fuel cell installation. Bloom Energy will furnish No Smoking signs for the area.
- Ensure only Bloom Energy Service Providers are permitted access inside the system.
- Keep the area around the fuel cell installation clear for ten feet in all directions, for safety and ease of maintenance.
- Keep the area around the fuel cell power system clear and free of combustible materials, gasoline, and other flammable vapors and liquids.
- Shut the system down and call Bloom Energy immediately if you suspect a fuel line rupture.
- **Never enclose an operating system** in a tarp, tent, shed, or other structure that would allow air to become trapped. This system runs on natural gas, and produces trace amounts of CO and CO2. The amounts of these gases are safe for normal outdoor operation but could gather in an enclosed place.
- Do not block or obstruct air openings on the fuel cell power system. This system requires air flow in order to operate.

- Do not use this fuel cell power system if any part has been under water. Immediately call qualified service personnel to inspect the fuel cell power system and to replace any functional part which has been under water.
- Please contact Bloom Energy at 408-543-1678 with as much advance notice as possible if you plan, detect, or suspect a prolonged Internet outage.
- The Bloom Energy Field Service team will periodically clean the equipment; do not spray with pressurized hoses.

### 9.2 Maintenance

Your site has specific Field Service personnel assigned to it for both routine maintenance and troubleshooting. Your site project manager will introduce you to the designated Bloom Energy Field Service team assigned to your site prior to operation.

Bloom Energy Field Service personnel are trained in state Safety Law. They are trained in all the procedures required for the fuel cell installation, and their toolkit includes all the safety equipment required to work around the fuel components and high voltage in our system (480VAC).

Bloom Energy also requires its employees to follow all necessary safety precautions, including:

- Every time a Field Service technician arrives at a site for the first time and opens a service panel, the technician will use a leak detector to determine whether there is any gas buildup in the system and determine that it is safe to work on it.
- Whenever a Field Service technician is removing and replacing a component on a fuel or exhaust line, the technician must keep a CO detector nearby to make sure that no CO is present in the line even after the system has been shut down.

The Field Service team expects to conduct quarterly and yearly preventative maintenance for certain types of consumable or cleanable components such as replacement of air filters, water filters, and desulfurizer beds. Other maintenance will be performed as required. During such times, inspections for any hazards will be conducted including quarterly fire extinguisher inspection (if applicable).

## 10. TRAINING

Prior to system startup, a Bloom Energy representative will provide training on the fuel cell installation to include the location and operation of safety features as well as actions to take during emergencies. We desire this training to provide lasting value and are more than happy to work with you to customize the experience to suit your needs.

# Appendix C  Agency Correspondence

In replies, please use
2022-FRA-56310

January 25, 2023

Brian L. Bridgewater
Regulatory Project Manager, North Branch
U.S. Army Corps of Engineers
Huntington District
502 8th Street
Huntington, WV 25701

**RE: Section 106 Review- CMHH072 Project, Scioto Darby Creek Road, Hilliard, Franklin County, Ohio (LRH-2020-906-SCR)**

Dear Mr. Bridgewater:

This letter is in response to your correspondence, received on January 12, 2023, regarding the CMHH072 Project, Scioto Darby Creek Road, Hilliard, Franklin County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]) and Ohio Revised Code 149.53.

*Phase I Cultural Resource Management Investigations for the 48 ha (118.7 ac) CMH072 Development Project in Norwich Township, Franklin County, Ohio* (Weller & Associates, Inc. (Weller); Weller and McIntosh 2023) was submitted to the SHPO office for review.

A literature review, visual inspection, and shovel test unit excavations of the approximate 118.7- acre property were completed as part of the investigations. Three previously identified archaeological sites are located within the project area (33FR3511-3513) and these were not deemed significant. Two (2) new archaeological sites were documented during the Phase I survey of the APE, Ohio Archaeological Inventory (OAI)# 33FR3522-3523. One is a small lithic site (n=2) and the other is an isolated prehistoric find. Neither site is likely to yield additional information about Ohio prehistory. Weller recommends that these properties are not eligible for inclusion in the NRHP. Our office agrees with Weller's recommendations of eligibility.

The SHPO office agree the proposed project will no effect to any historic properties and no further work is necessary. No further coordination is necessary unless the project changes or new or additional historic properties are discovered during the implementation of the project. In such a situation, the SHPO should be contacted as per 36 CFR 800.13. Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs.
If you have any questions, please contact me via email at dgagliano@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Dawn Walter Gagliano, MA
Project Reviews Manager, Resource Protection and Review
Ohio State Historic Preservation Office

Ser. No. 1096386



800 E. 17th Ave., Columbus, OH 43211-2474 • 614.297.2300 • ohiohistory.org

Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR MARY MERTZ, DIRECTOR

**Office of Real Estate**
*John Kessler, Chief*
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
*Phone: (614) 265-6621*
*Fax: (614) 267-4764*

January 21, 2022

Jamie VanDusen
Ramboll
8805 Governor's Hill Drive
Suite 164
Cincinnati, OH 45249

**Re:** 21-1157; CMH-072 Site

**Project:** The site is being assessed as part of a proposed industrial development.

**Location:** The proposed project is located in Norwich Township, Franklin County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

**Natural Heritage Database:** The Natural Heritage Database has no records at or within a one-mile radius of the project area.

A review of the Ohio Natural Heritage Database indicates there are no other records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the project area. The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

**Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH $\geq$ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "*OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING*". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "*Range-wide Indiana Bat Survey Guidelines*." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.

| Federally Endangered | Federally Threatened |
|---|---|
| purple cat's paw (*Epioblasma o. obliquata*) | rabbitsfoot (*Quadrula cylindrica cylindrica*) |
| clubshell (*Pleurobema clava*) | |
| northern riffleshell (*Epioblasma torulosa rangiana*) | |
| rayed bean (*Villosa fabalis*) | |
| snuffbox (*Epioblasma triquetra*) | |

| State Endangered | State Threatened |
|---|---|
| elephant-ear (*Elliptio crassidens crassidens*) | black sandshell (*Ligumia recta*) |
| Long solid (*Fusconaia maculata maculate*) | fawnsfoot (*Truncilla donaciformis*) |
| Ohio pigtoe (*Pleurobema cordatum*) | pondhorn (*Uniomerus tetralasmus*) |
| pocketbook (*Lampsilis ovata*) | threehorn wartyback (*Obliquaria reflexa*) |
| washboard (*Megalonaias nervosa*) | |

Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the following listed fish species.

| State Endangered | State Threatened |
|---|---|
| goldeye (*Hiodon alosoides*) | lake chubsucker (*Erimyzon sucetta*) |
| Iowa darter (*Etheostoma exile*) | paddlefish (*Polyodon spathula*) |
| popeye shiner (*Notropis ariommus*) | Tippecanoe darter (*Etheostoma tippecanoe*) |
| northern brook lamprey (*Ichthyomyzon fossor*) | |
| spotted darter (*Etheostoma maculatum*) | |
| shortnose gar (*Lepisosteus platostomus*) | |
| tonguetied minnow (*Exoglossum laurae*) | |

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the black-crowned night-heron *(Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through august 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

**Water Resources:** The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)

**Jamie VanDusen**

| | |
|---|---|
| **From:** | Ohio, FW3 <ohio@fws.gov> |
| **Sent:** | Thursday, January 6, 2022 9:49 AM |
| **To:** | Jamie VanDusen |
| **Cc:** | nathan.reardon@dnr.state.oh.us; Parsons, Kate; Hazelton, Erin |
| **Subject:** | Ramboll No.1690024664 - CMH-072 Site Development Project, Franklin County, Ohio |
| **Attachments:** | 2020 USFWS Federally Listed Bat Permitees - Ohio.pdf |

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994

TAILS# 03E15000-2022-TA-0527

Dear Ms. VanDusen,

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption.

Female Indiana bats exhibit strong site fidelity to summer roosting and foraging areas, meaning that they return to the same area, and often the same trees, to roost year after year. Because the project will result in a large amount of forest clearing relative to the available habitat in the immediately surrounding area, habitat removal could result in significant impacts to Indiana bats. Because of this, the proposed project may result in indirect adverse effects to Indiana bats, even if tree clearing is conducted during the winter season when Indiana bats are not present. Therefore, *we recommend that a summer survey be conducted to determine presence or absence of Indiana bats at the project site.* The summer survey must be conducted in coordination with the Ohio Field Office.

If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are also warranted. Portal surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office.

Survey results should be coordinated with this office prior to initiation of any work at the project area. Based on the results of the survey(s), we will evaluate potential impacts to the Indiana bat from the proposed project. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

Patrice Ashfield

Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW

# Appendix D  Threatened and Endangered Species List

| Scientific Name | Common Name | Status | Agency Comments | Avoidance Dates | Potential Impacts |
|---|---|---|---|---|---|
| Bats | | | | | |
| *Myotis sodalis* | Indiana bat | State and Federal Endangered | If trees are present and must be cut, cutting should occur from October 1 to March 31. A desktop assessment should be conducted, followed by a field assessment if needed, to determine potential hibernacula present within 0.25 miles of the Project. | April 1 – September 30 without additional coordination and surveys. | No tree clearing is proposed for the Project. No potential hibernacula were observed within the Project area. No impacts to bat species are proposed. |
| *Myotis septentrionalis* | Northern long-eared bat | State and Federal Endangered (Federal Threatened at time of coordination) | | | |
| *Myotis lucifugus* | Little brown bat | State Endangered | | | |
| *Perimyotis subflavus* | Tricolored bat | State Endangered; Federal Proposed Endangered | | | |
| Mussels | | | | | |
| *Epioblasma o. obliquata* | Purple Cat's Paw | State and Federal Endangered | Due to the location and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. | Not Applicable | None – No streams in Project work areas and no in-water work proposed. |
| *Pleurobema clava* | Clubshell | | | | |
| *Epioblasma torulosa rangiana* | Northern Riffleshell | | | | |
| *Vilosa fabalis* | Rayed Bean | | | | |
| *Epioblasma triquetra* | Snuffbox | | | | |
| *Quadrula cylindrica cylindrica* | Rabbitsfoot | State and Federal Threatened | | | |
| *Elliptio crassidens crassidens* | Elephant-ear | | | | |
| *Fusconaia maculata maculate* | Long Solid | | | | |
| *Pleurobema cordatum* | Ohio Pigtoe | | | | |
| *Lampsilis ovata* | Pocketbook | | | | |
| *Megalonaias nervosa* | Washboard | | | | |
| *Ligumia recta* | Black Sandshell | State Threatened | | | |
| *Truncilla donaciformis* | Fawnsfoot | | | | |
| *Uniomerus tetralasmus* | Pondhorn | | | | |
| *Obliquaria reflexa* | Threehorn Wartyback | | | | |

| Scientific Name | Common Name | Status | Agency Comments | Avoidance Dates | Potential Impacts |
|---|---|---|---|---|---|
| Fishes | | | | | |
| *Hiodon alosoides* | Goldeye | State Endangered | The Project is within the range of these species. If no in-water work is proposed, impacts to these species are not likely. | March 15-June 30 | None – No streams in Project work areas and no in-water work proposed. |
| *Etheostoma exile* | Iowa Darter | | | | |
| *Notropis ariommus* | Popeye Shiner | | | | |
| *Ichthyomyzon fossor* | Northern Brook Lamprey | | | | |
| *Etheostoma maculatum* | Spotted Darter | | | | |
| *Lepisosteus platostomus* | Shortnose Gar | | | | |
| *Exoglssum laurae* | Tonguetied Minnow | | | | |
| *Erimyzon sucetta* | Lake Chubsucker | State Threatened | | | |
| *Polyodon spathula* | Paddlefish | | | | |
| *Etheostoma tippecanoe* | Tippacanoe Darter | | | | |
| Birds | | | | | |
| *Botaurus lentiginosus* | American Bittern | State Endangered | If habitat consisting of undisturbed wetlands that have scattered small pools amongst dense vegetation will be impacted, construction should be avoided during nesting period. | May 1 – July 31 | None – No suitable habitat. |
| *Circus hudsonis* | Northern Harrier | | If habitat consisting of large marshes or grasslands will be impacted, construction should be avoided during nesting period. | April 15 – July 31 | |
| *Chondestes grammacus* | Lark Sparrow | | If habitat consisting of grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil will be impacted, construction should be avoided during nesting period. | May 1 – July 31 | |
| *Bartramia longicauda* | Upland Sandpiper | | If habitat consisting of dry grasslands, seeded grassland, grazed and ungrazed pasture, hayfields, and grasslands established through CRP will be impacted, construction should be avoided during the nesting period. | April 15 – July 31 | |
| *Nycticorax nycticorax* | Black-crowned Night-heron | State Threatened | If nesting habitat consisting small trees, saplings, shrubs, or sometimes on the ground near bodies of water and wetlands will be impacted, construction should be avoided during nesting period. | May 1 – July 31 | |
| *Ixobrychus exilis* | Least Bittern | | If habitat consisting of dense emergent wetlands with thick stands of cattails, sedges, sawgrass, or other semiaquatic vegetation interspersed with woody vegetation and open water will be impacted, construction should be avoided during nesting period. | May 1 – July 31 | |
| *Grus canadensis* | Sandhill Crane | | If habitat consisting of grassland, prairie, or wetland habitat will be impacted, construction should be avoided during nesting period. | April 1 – August 31 | |

# Appendix E  Ohio Isolated Wetland Permit

Ohio Environmental Protection Agency

**Mike DeWine**, Governor
**Jon Husted**, Lt. Governor
**Anne M. Vogel**, Director

**Re: CMH72**
**Permit - Intermediate Approval**
**401 Wetlands**
**Franklin**
**DSW401227945W**

January 17, 2023

Steven Meyers
Amazon Data Services
410 Terry Avenue North
Seattle, WA 98109
sdmeyers@amazon.com

Subject: CMH72
Franklin County / Hilliard
Grant of a Level Three Isolated Wetland Permit
Ohio EPA ID No. 227945W

Dear Stakeholders:

I hereby authorize the above referenced project under the following authorities, and it is subject to the following modifications and/or conditions:

Ohio Isolated Wetland Permit

Pursuant to Ohio Revised Code Chapter 6111, I hereby conclude that the above-referenced project will comply with the applicable provisions of Ohio Revised Code Sections 6111.02 through 6111.028. This authorization is specifically limited to an Ohio Isolated Wetlands Permit (here after referred to as "permit") with respect to water pollution and does not relieve the Permittee of further Certifications or Permits as may be necessary under the law. I have determined that a lowering of water quality in the Upper Scioto watershed (HUC 05060001) as authorized by this permit is necessary. I have made this determination based upon the consideration of all public comments, if submitted, and the technical, social, and economic considerations concerning this application and its impact on waters of the state. In accordance with ORC Section 6111.021(C), this permit shall serve as the state's 401 water quality certification to the extent that any of these waters are deemed jurisdictional under the Federal Water Pollution Control Act.

## *PART I ON-SITE WATER RESOURCES AND IMPACTS*

A. Watershed Setting

The watershed in which this project is located, Hayden Run – Scioto River (HUC 05060001-12-04), has an area of 48.1 square miles. Pursuant to OAC 3745-1-09, Scioto River is a warmwater habitat (WWH) stream and primary contact recreation water. Additionally, the watershed is designated as an agricultural and industrial water supply.

B. Project Description

Amazon Web Services is proposing to construct a web service data center facility consisting of 9 data center buildings, an electrical substation with an adjoining switchyard, a water storage/treatment facility, a security guardhouse, internal access roads, parking areas, utilities, and six stormwater management basins.

C. Impacts

Impacts to isolated wetlands are as follows:

Permanent impacts to 4.64 acres of isolated wetlands due to placement of fill.

| Wetland ID | Isolated or Non-isolated? | Forested or Non-Forested | Category | Total Acreage on Site | Total Acreage Impacted | Percent Avoided |
|---|---|---|---|---|---|---|
| A | Isolated | Non-Forested | 1 | 0.45 | 0.45 | 0% |
| C | Isolated | Forested | 2 | 0.07 | 0.07 | 0% |
| D | Isolated | Forested | 2 | 0.27 | 0.27 | 0% |
| E | Isolated | Non-Forested | 2 | 0.14 | 0.14 | 0% |
| F | Isolated | Non-Forested | 2 | 0.23 | 0.23 | 0% |
| G | Isolated | Forested | 2 | 0.04 | 0.04 | 0% |
| H | Non-isolated | Non-Forested | 1 | 0.02 | 0 | 100% |
| I | Isolated | Forested | 2 | 0.34 | 0.34 | 0% |
| J | Isolated | Forested | 2 | 1.50 | 1.50 | 0% |
| K | Isolated | Forested | 2 | 0.44 | 0.44 | 0% |
| L | Isolated | Forested | 2 | 0.17 | 0 | 100% |
| M | Isolated | Forested | 2 | 0.09 | 0.09 | 0% |
| B | Isolated | Forested | 2 | 1.07 | 0.37 | 0% |
| | | Non-Forested | | | 0.70 | |
| | | | Totals | 4.83 | 4.64 | 3.93% |

## *PART II TERMS & CONDITIONS*

A. Terms and conditions outlined in this section apply to project as described in this permit.

B. This permit shall be valid for a period of 5 years from the date of issuance.

C. The Permittee shall notify Ohio EPA, in writing, and in accordance with *Part IV* (*NOTIFICATIONS TO OHIO EPA*) of this permit, upon the start and completion of site development construction.

D. A copy of this permit shall remain on-site for the duration of the project construction activities.

E. In the event of an inadvertent spill, the Permittee must immediately call the Ohio EPA Spill Hotline at 1-800-282-9378, as well as the Ohio EPA Section 401 Manager (614-644-2001).

F. Unpermitted impacts to surface water resources and/or their buffers occurring as a result of this project must be reported within 24 hours of occurrence to Ohio EPA, Division of Surface Water, Section 401 Manager (614-644-2001), for further evaluation.

G. Pesticide application(s) for the control of plants and animals shall be applied in accordance with the NPDES General Permit to Discharge Pesticides In, Over or Near Waters of the State available at: https://epa.ohio.gov/static/Portals/35/permits/OHG870002_FINAL_PERMIT.pdf and may require a pesticide applicator license from the Ohio Department of Agriculture.

H. Any authorized representative of the director shall be allowed to inspect the authorized activity at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.

I. In the event that there is a conflict between the permit application, and the conditions within this permit, the condition shall prevail unless Ohio EPA agrees, in writing, that the permit application or other provision prevails.

J. This proposal may require other permits from Ohio EPA. For information concerning application procedures, contact the Ohio EPA District Office as follows:

Ohio Environmental Protection Agency
Central District Office
50 W. Town Street, Suite 700
Columbus, Ohio 43215-1049
614-728-3778

**Additional information regarding environmental permitting assistance at Ohio EPA can be found at https://epa.ohio.gov/wps/portal/gov/epa/stay-compliant/get-help/permit-assistance**

K. Best Management Practices (BMPs)

1. All water resources and their buffers which are to be avoided shall be clearly indicated on site drawings, demarcated in the field and protected with suitable materials (e.g., silt fencing) prior to site disturbance. These materials shall remain in place and be maintained throughout the construction process.

2. All BMPs for stormwater management shall be designed and implemented in accordance with the most current edition of the Ohio Department of Natural Resources Rainwater and Land Development Manual, unless otherwise required by the National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges associated with construction activities (construction general permit), if required.

   A copy of the Rainwater and Land Development Manual is available at: https://epa.ohio.gov/wps/portal/gov/epa/divisions-and-offices/surface-water/guides-manuals/rainwater-and-land-development

   A copy of the NPDES construction general permit is available at: https://epa.ohio.gov/static/Portals/35/permits/OHC000005/Final_OHC000005.pdf

3. Straw bales shall not be used as a form of erosion/sediment control.

4. Fill material shall consist of suitable non-erodible material and shall be stabilized to prevent erosion.

5. Materials used for fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Broken asphalt is specifically excluded from use as fill or bank protection.

6. Concrete rubble used for fill or bank stabilization shall be in accordance with ODOT specifications; free of exposed re-bar; and, free of all debris, soil and fines.

7. Chemically treated lumber which may include, but is not limited to, chromated copper arsenate (CCA) and creosote treated lumber shall not be used in structures that come into contact with waters of the state.

8. Trees removed from temporary impact areas to facilitate construction shall be replaced with appropriate tree species native to Ohio.

9. To reduce erosion and sedimentation during construction activities, the following will be utilized:

    i. A designated construction entrance
    ii. Silt fencing/filter socks
    iii. Inlet protection
    iv. Seeding of exposed soils
    v. Temporary sediment settling basins

10. Culverts

    a. Stream culverts shall be installed and designed at the streambed slope to allow for the natural movement of aquatic organisms and bedload to form a stable bed inside the culvert.

    b. The culvert base or invert with the substrate shall be installed below the sediment to allow natural channel bottom to develop and to be retained.

    c. The channel bottom substrate shall be similar to and contiguous with the immediate upstream and downstream reaches of the stream. The culvert shall be designed and sized to accommodate bankfull discharge and match the existing depth of flow to facilitate the passage of aquatic organisms.

    d. Where culverts are installed for temporary crossings, the bottom elevations of the stream shall be restored as nearly as possible to pre-project conditions.

L. Wildlife Protection

1. No in-water work in perennial streams shall take place during the environmental window March 15 through June 30, unless specifically approved by the Ohio Department of Natural Resources, Division of Wildlife, in writing, with a copy provided to Ohio EPA prior to undertaking any in-water work during the environmental window.

2. If native mussels and/or mussel beds, not previously identified, are encountered at any time during construction or dredging activities, work must cease immediately, and the Ohio Department of Natural Resources' Division of Wildlife must be contacted for further evaluation.

3. In the event that an eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) is encountered during construction of the project, work should immediately cease and the Ohio Department of Natural Resources, Division of Wildlife contacted. Caution should be employed during construction and during the snakes' active season (March 15 - November 15).

4. The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31.

5. The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state threatened bird. These night herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31.

6. The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass, or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31.

7. The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31.

## ***PART III MITIGATION***

A. Description of Required Mitigation

As mitigation for 4.64 acres of wetland impact including 0.45 acres of non-forested category 1 wetland, 1.07 acres of non-forested category 2 wetlands, and 3.12 acres of forested category 2 wetlands, the permittee has purchased 10.9 credits from Green Camp Wetland Mitigation Bank located in Marion County within the Upper Scioto watershed (HUC 0506001). A copy of the fully executed mitigation bank agreement with Green Camp Wetland Mitigation Bank dated August 16, 2022 has been provided to Ohio EPA.

## *PART IV NOTIFICATIONS TO OHIO EPA*

All notifications, correspondence, and reports regarding this permit shall reference the following information:

Permittee Name: Steven Meyers / Amazon Data Services
Project Name: CMH72
Ohio EPA ID No.: 227945W

and shall be sent to:

Ohio Environmental Protection Agency
Division of Surface Water, 401/IWP Unit
Lazarus Government Center
50 West Town Street
P.O. Box 1049
Columbus, Ohio 43216-1049

You are hereby notified that this action of the director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within 30 days after notice of the director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Treasurer, State of Ohio," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the director within three days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, Ohio 43215

Sincerely,

Anne M Vogel

Anne M. Vogel
Director

ec: Kayla Osborne, kayla.n.osborne@usace.army.mil, Department of the Army, Huntington District, Corps of Engineers
Wes Barnett, wes.barnett@usace.army.mil, Department of the Army, Huntington District, Corps of Engineers
U.S. EPA, Region 5, R5Wetlands@epa.gov
Patrice Ashfield, Ohio@fws.gov, U.S. Fish & Wildlife Service
Mike Pettegrew, Mike.Pettegrew@dnr.state.oh.us, ODNR, Office of Real Estate
Diana Welling, dwelling@ohiohistory.org, Ohio Historical Preservation Office
Andrew Graves, andrew.graves@epa.ohio.gov, Ohio EPA, DSW, 401/Wetlands/Mitigation Section
Andrea Kilbourne, Andrea.Kilbourne@epa.ohio.gov, Ohio EPA, DSW, Mitigation Coordinator
Mike Gallaway, Michael.Gallaway@epa.ohio.gov, Ohio EPA
Cal Miller, wetlandsresource@aol.com, The Wetlands Resource Center
Jamie VanDusen, Ramboll Americas Engineering Solutions Inc., Jamie.vandusen@ramboll.com

Ohio EPA has developed a customer service survey to get feedback from regulated entities that have contacted Ohio EPA for regulatory assistance, or worked with the Agency to obtain a permit, license or other authorization. Ohio EPA's goal is to provide our customers with the best possible customer service, and your feedback is important to us in meeting this goal. Please take a few minutes to complete this survey and share your experience with us at http://www.surveymonkey.com/s/ohioepacustomersurvey.

# Appendix F Ohio Isolated Wetland Permit Annual Update Report

RAMBOLL

ENVIRONMENT
& HEALTH

Ohio Environmental Protection Agency
Division of Surface Water, 401/IWP Unit
Lazarus Government Center
50 West Town Street
P.O. Box 1049
Columbus, Ohio 43216-1049

Date December 17, 2024

Annual Update Report
Permittee Name: Steven Meyers/Amazon Data Services
Project Name: CMH072
Project Location: Hilliard, Franklin County, Ohio
Ohio EPA ID No.: 227945W

Ramboll
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Suite 205
Cincinnati, OH 45249
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On behalf of Amazon Data Services, Ramboll Americas Engineering Solutions, Inc. (Ramboll) presents to you this Annual Update Report for the 2024 reporting year as it relates to the CMH072 site located in Hillard, Franklin County, Ohio.

On January 17, 2023, the Ohio Environmental Protection Agency (Ohio EPA) issued a Level Three Isolated Wetland Permit for the CMH072 project. The permit authorized permanent impacts to approximately 4.64 acres of isolated wetlands. In addition, pursuant to Section 6111.03(J)(1) of the Ohio Revised Code, the Ohio EPA approved proposed impacts Blatz Lake, a Water of the State, in a letter dated January 24, 2023.

Pursuant *Part III Notifications to Ohio EPA* of the January 24, 2023, authorization letter, a project construction update report shall be submitted to Ohio EPA by December 31 of each year following the date of this permit and until project construction is complete. This letter serves as the Annual Update Report to the Ohio EPA for the 2024 Reporting Year. It is anticipated that construction activities will be completed in 2025. Upon completion of construction, an as-built drawing will be submitted as part of the 2025 Annual Update Report.

The filling activities of Blatz Lake, a Water of the State, was completed in 2023. A summary of the authorized isolated wetland impact year to date is presented below in **Table 1** and depicted in **Figure 1** (enclosed).

**Table 1. Summary of Authorized Isolated Wetland Fill Activities**

| Isolated Wetland ID | Start Date of Wetland Fill Activity | Finish Date of Wetland Fill Activity | Acres of Fill Authorized | Acres Filled in 2023 and 2024 |
|---|---|---|---|---|
| **Wetland A** | 5/24/2024 | Estimated 6/2025 | 0.45 | 0.25 |
| **Wetland B** | 9/11/2023 | 9/26/2023 | 1.07 | 1.07 |
| **Wetland C** | 9/11/2023 | 9/26/2023 | 0.07 | 0.07 |
| **Wetland D** | 9/11/2023 | 9/26/2023 | 0.27 | 0.27 |
| **Wetland E** | 6/22/2023 | 4/12/2024 | 0.14 | 0.14 |
| **Wetland F** | 6/22/2023 | 4/12/2024 | 0.23 | 0.23 |
| **Wetland G** | 4/24/2023 | 4/24/2023 | 0.04 | 0.04 |
| **Wetland I** | 5/25/2023 | 6/15/2023 | 0.34 | 0.34 |
| **Wetland J** | 5/25/22023 | 9/7/2023 | 1.50 | 1.50 |
| **Wetland K** | 8/21/2023 | 9/7/2023 | 0.44 | 0.44 |
| **Wetland L** | Avoided Wetland per Isolated Wetland Permit | | | |
| **Wetland M** | 9/11/2023 | 9/26/2023 | 0.09 | 0.09 |
| **Total Acres of Isolated Wetland** | | | **4.64** | **4.44** |

## Current Contract Information

It should be noted that Mr. Steven Meyers, the permittee point of contact listed in the permit, is no longer with Amazon Data Services. The new point of contract is now Robert Truedinger, as stated below.

Robert Truedinger
Permittee
robbtrue@amazon.com

Joumana Abou-Nahra
Permittee; Technical Contact
abounj@amazon.com
514-836-7133

Austin Hounshell
Permittee; Local Technical Contact
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Jamie VanDusen
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517-282-8575

Andrew Luxon
General Contractor; Project Manager; Gray Construction, Inc.
aluxon@gray.com

Please feel free to contact Austin Hounshell, the designated point of contact for matters related to this permit, if you have any questions or concerns. He can be reached at austhoun@amazon.com or 513-673-9449.

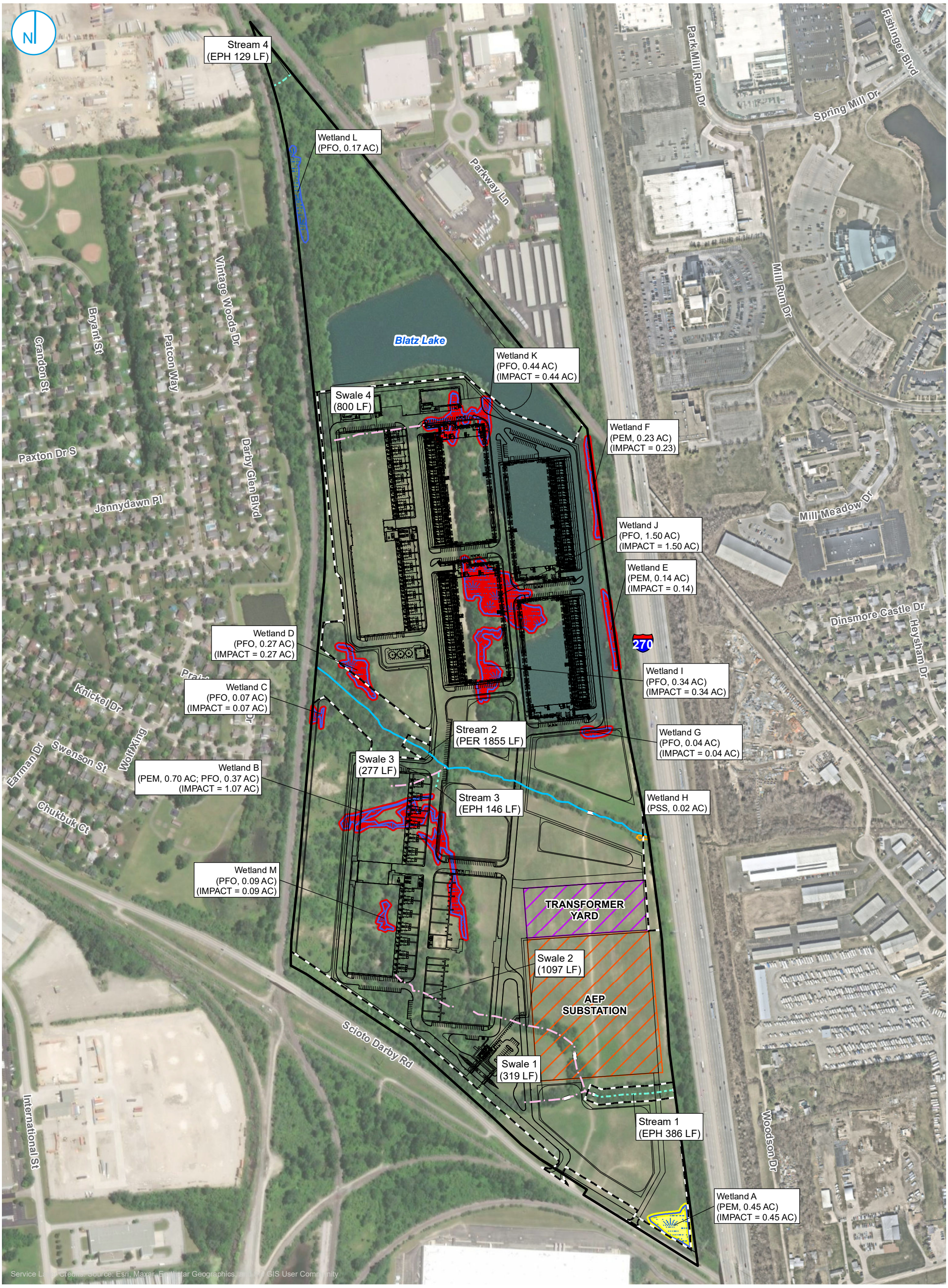
Yours sincerely

**Jamie VanDusen**
Project Manager
1946177 – MWH Ecological Services

M 517-282-8575
jamie.vandusen@ramboll.com

Enclosure: Figure 1 – Authorized Isolated Wetland Impact Map

## FIGURE 1
## AUTHORIZED ISOLATED WETLAND IMPACT MAP




- Approximate Site Boundary
- Limits of Disturbance
- Design Component
- AEP Substation
- Transformer Yard
- Culvert
- Swale
- Ephemeral Stream
- Perennial Stream
- Isolated Wetland
- Non-Isolated Wetland
- Authorized Isolated Wetland Impact Not Complete
- Authorized Isolated Wetland Impact Complete

0 225 450 Feet

# AUTHORIZED ISOLATED WETLAND IMPACT MAP 2024 REPORTING YEAR

**CMH-072**
**Scioto Darby Creek Road**
Hilliard, Franklin County, Ohio

**Figure 1**

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ENGINEERING SOLUTIONS, INC.

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