Appendix H

FIRE PREVENTION AND MANAGEMENT PLAN

Lost City Renewables LLC

Muhlenberg County, Kentucky



Fire Prevention and Management Plan

Lost City Renewables LLC Muhlenberg County, Kentucky

25 January 2025

Prepared by Copperhead Environmental Consulting, Inc.



TABLE OF CONTENTS

PURPOSE	.3
GENERAL FACILITY INFORMATION	.3
Project Location and Overview	.3
Fire Detection	.3
Shut-off Procedures and Locations	.3
Operational Contacts	.4
ROLES AND RESPONSIBILITIES	.4
Site Operator	.5
Supervisors	.5
Emergency Services Coordinator	.5
Fire Management Leads	.5
All Project Personnel (Construction, Operation, and Contractors)	.6
FIRE PREVENTION AND PROTECTION DURING CONSTRUCTION	.6
Welding and Cutting	.7
Equipment Operation and Storage	.7
Smoking and Fire Rules	.7
Firefighting Equipment	.8
Fire Extinguishers	.8
Water	.8
OPERATION AND MAINTENANCE ACTIVITIES	.8
Emergency Response	.9
WILDFIRE AND EXTREME WEATHER RESPONSE1	10
WILDFIRE AND EXTREME WEATHER RESPONSE1 SITE DESIGN MITIGATION MEASURES1	10 10
WILDFIRE AND EXTREME WEATHER RESPONSE	10 10 10



Roadv	way Design and Access	11
	Vertical Clearance	11
	Grade	11
	Surface	
	Gates	11



Purpose

The Lost City Solar Project (Project or Lost City) Fire Prevention and Management Plan (FPMP or Plan) describes actions to ensure the safety of Project employees, emergency services members, construction and contractor personnel, and the surrounding community in the event of a fire. This FPMP provides emergency personnel contact information and outlines procedures to prevent, mitigate, and effectivity respond to an incident should one arise at the Project.

General Facility Information

Project Location and Overview

The Project is an approximately 250 MW solar facility located in Muhlenberg County, southeast of the unincorporated community of Penrod, Kentucky. The Project is owned by Lost City Renewables LLC.

The Project Site is approximately 1,413 acres and is bordered by two highways (KY 949 and US 431). Additional primary and secondary roads adjacent to the property include Free Lane along the northwest corner, and Forgy Mill Road and Mason-Poyner Road to the south.

Fire Detection

In the event of a fire, the Lost City Renewables Operations Control Center will detect equipment faults which will then lead to a notification to the local fire and emergency services and dispatch of personnel to investigate accordingly. There is no fire suppression system for the inverters located on-site.

Shut-off Procedures and Locations

Entry to the Project Site should only be attempted at the direction of the Site Operator. Contact information for the Site Operator is provided below.

In the event of an emergency requiring shutdown, the solar system may be de-energized/ isolated remotely, but local disconnects require manual operation. Emergency responders shall not assume the system is de-energized nor attempt to de-energize equipment due to arc flash risk.

At the direction of the Site Operator, emergency personnel may disconnect power blocks within the solar arrays at each inverter according to the following procedures:

- The ON/OFF switch on each inverter shall be manually turned to the OFF position, shutting off both the AC and DC switches inside the inverter.
- After the system has been turned off, the DC Disconnect Switch shall be turned off, and a lock will be placed on it to keep it from being re-energized.



Operational Contacts

The following people are responsible for the operation, maintenance, and safety of the Lost City Solar Project. The Site Operator conducts local monitoring of the Project Site on a regular basis. In addition, Lost City Renewables has remote monitoring and operating capabilities from their central control center. Should issues arise, central control will dispatch local operations personnel to the site, as necessary.

Project Site Contact	Name	Phone Number
Lost City Renewables Project Manager	TBD	XXXXX
Construction Supervisor	TBD	XXXXX
Lost City Site Operator	TBD	XXXXX

Additional contacts that may require coordination regarding this plan and operation of the Project include the following.

Contact	Address/Location	Phone Number
Dunmor Volunteer Fire Department	30 E Elm St. Dunmor, KY 42339	270-657-8100
Muhlenberg County Sheriff's Office	100 S Main St. Greenville, KY 42345	270-338-3345
Emergency Services Coordinator	TBD	XXXXX

Roles and Responsibilities

Implementation of this Plan is the responsibility of all Project employees and contractors. All Project employees and contractors are required to demonstrate knowledge of the elements of the Plan and to carry out responsibilities as outlined below.



Site Operator

The Site Operator will be responsible for the following fire safety measures:

• Conduct regular local monitoring of the site.

Supervisors

Project Supervisors will be responsible for the following fire safety measures:

- Ensure that each employee, subcontractor, or any other individual or company working on the Project site is aware of the provisions of this FPMP, is familiar with the location and proper use of firefighting equipment and conducts themselves in a fire-safe manner.
- Train assigned employees in the safe storage, use, and handling of flammable materials, the use of fire-fighting equipment to fight incipient-stage fires, and the requirements of this fire plan.
- Ensure flammable material storage areas are properly maintained.

Emergency Services Coordinator

A designated Project Emergency Services Coordinator will be responsible for the following fire safety measures:

- Ensure that Fire Management Leads are properly trained and guided to enforce all provisions of this Plan.
- Ensure fire-suppression systems, such as extinguishers and fire-fighting equipment, are periodically inspected (at least weekly), and maintained in working order.
- Train Fire Management Leads and other project personnel of evacuation routes and procedures for reporting fires.
- Monitor National Weather Service (NWS) Red Flag Warnings and state/local fire agency alerts, bulletins, and notifications issued for the project vicinity daily, and communicate fire risk to project personnel.
- Maintain FPMP training records.
- Implement training, inspections, and other responsibilities during Project operation and maintenance (see the "Operation and Maintenance Activities" section of this Plan)

Fire Management Leads

Each working crew will have a designated Fire Management Lead responsible for the following fire safety measures:

- Enforce all provisions of this Plan.
- Ensure that all work areas, equipment, and vehicles are equipped with properly maintained fire extinguishing equipment and medical first aid kits for the work being performed.



- Ensure fire-suppression systems, such as extinguishers, are periodically inspected and maintained in working order.
- In coordination with Supervisors, train Project personnel on the locations and use of fire extinguishing equipment for fighting incipient-stage fires.
- Inform Project personnel on evacuation routes and procedures for reporting fires.
- Take suppression action for incipient-stage fires if necessary.
- Patrol all work areas after the close of work before finishing for the day.

All Project Personnel (Construction, Operation, and Contractors)

All on-site project personnel will be responsible for the following fire safety measures:

- Use, store, and transfer flammable materials in accordance with provided training.
- Use approved spark arrestors on all equipment.
- Do not mix flammable materials.
- Report potential fire hazards or violations of the Plan to the Fire Lead, Emergency Services Coordinator, and/or Supervisor immediately.
- Take reasonable actions to suppress incipient-stage fires, report fires, and comply with this Plan.

Fire prevention and protection during construction

The first step in the construction process will be to remove existing vegetation. After the initial removal, the site will be maintained to a vegetation height below 18 inches. Installation of the photovoltaic panels and their components will be performed by qualified professionals employed by a licensed and insured contractor.

During construction, fires could be caused by a variety of factors, including vehicle exhaust, sparks associated with grading activities, welding activities, parking on dry vegetation, and the overall temporary increase in human activity. Accidental ignition could result in a fire, which, depending on the location, could spread.

In addition, the Project owner (Lost City Renewables) and/or contractor will present basic fireprevention training to all personnel working at the Project site, maintain documentation of all training, and implement the following:

• All employees, contractors, and employees of contractors will do everything reasonable within the power, expertise, and assessment of human safety, both independently and upon request of Lost City Renewables, to prevent and suppress fires resulting from construction or maintenance activities of the Project. If a fire is suppressed by a



construction worker or contractor, the occurrence will be reported to Lost City Renewables.

- The Site Operator must ensure that each employee, subcontractor, or any other individual or company working on the Project site is aware of the provisions of this FPMP, is familiar with the location and proper use of firefighting equipment and conducts themselves in a fire-safe manner.
- Vegetation will be removed prior to construction to minimize fire risk. Measures to minimize fire risk will include removal of dry vegetation and/or other combustible materials within 30 feet of any hazardous material storage, compressed gas storage, or equipment/vehicle that has the potential to spark a fire.
- All electric inverters and the transformer will be constructed on concrete foundation structures or steel skids and tested prior to use to ensure safe operations and avoid fire risks.

Welding and Cutting

Welding operations are subject to the following provisions:

- No welding can occur when winds are over 15 miles per hour.
- Welding will occur only in areas cleared of all flammable vegetation and materials at a minimum radius of 30 feet from the welding operation.
- A fire patrol person/fire watch will be designated to observe and monitor the area for potential fire ignition during welding.
- Welding rigs will be equipped with a minimum of one 20-pound or two 10-pound fire extinguishers, and a minimum of 5 gallons of water in a pressurized water tank.

Hot work permits/approvals (for activities such as welding and metal cutting) will be obtained from the jurisdictional fire agency, if appropriate.

Equipment Operation and Storage

All internal combustion construction equipment and construction vehicles will be equipped with an acceptable muffler and effective spark arresters in proper working order. All equipment and work vehicles will be required to carry shovels and one 5-pound ABC fire extinguisher.

Construction staging areas, worker parking areas, and access roads will be designated and cleared of vegetation. No parking or construction activities will be allowed in non-designated areas. Vehicle idling will be limited.

Smoking and Fire Rules

Smoking shall be prohibited within 50-feet of combustible materials storage and limited to graveled areas or other areas cleared of all vegetation.



Fire rules will be posted on the Project bulletin board at the contractor's field office and areas visible to employees. All construction workers, plant personnel, and maintenance workers to perform maintenance activities will receive training on the procedures to be followed in the event of a fire. Training records will be maintained for review by the Emergency Services Coordinator.

Firefighting Equipment

All fire-fighting equipment will be marked conspicuously and be accessible. The Fire Management Leads will ensure the appropriate emergency equipment is on site and that the equipment is functional and serviceable. The Fire Management Leads will provide the locations of equipment to all employees. Emergency equipment and supplies shall include fire extinguishers and medical first aid kits.

Fire Extinguishers

Locations of portable fire extinguishers (5-pound Class ABC at minimum) will be placed at, but not limited to, each construction site (if construction occurs simultaneously at various locations), office spaces, hot work areas, flammable storage areas, and mobile equipment such as work trucks or other vehicles.

It is the responsibility of the Emergency Service Coordinator to oversee the inspection, maintenance, and testing of fire extinguishers to ensure that they are in proper working condition and maintained in accordance with local and federal Occupational Safety and Health Administration (OSHA) requirements and have not been tampered with or physically damaged.

Water

During construction, the contractor shall have water trucks with hoses available for initial fire suppression.

Operation and Maintenance Activities

Fire safety and suppression measures, such as smoke/fire detectors and extinguishers, will be installed in accordance with permit conditions, site requirements, and local laws. In addition, the Emergency Services Coordinator will implement the following during operations and maintenance at the facility:

- Train workers to prevent fires and to respond quickly and effectively if an incident occurs.
- Inspect and maintain a fire extinguisher and other fire prevention equipment in each vehicle.
- Prohibit smoking outside of designated smoking areas.



- Perform "hot work" (i.e., welding or working with an open flame or other ignition sources) in controlled areas. Hot work areas will be wetted down as necessary before hot work is performed. At minimum, a one-hour fire watch will be required after hot work is completed.
- Welding, cutting, grinding, or other flame- or spark-producing operations near the photovoltaic equipment/components should be minimized and, if required, closely supervised, with fire extinguishing equipment at hand.
- Remote monitoring of all major electrical equipment (transformers and inverters) will be used to screen for unusual operating conditions. Higher than normal temperatures, for example, can be compared with other operational factors to indicate the potential for overheating which under certain conditions could precipitate a fire. Units could then be shut down or generation curtailed remotely until corrective actions are taken.
- On-site vegetation near all solar arrays, ancillary equipment, and access roads shall be managed, as needed.
- Ensure that all exit or evacuation routes are free of obstructions.

Emergency Response

The Project Site is located within the jurisdiction of the Dunmor Volunteer Fire Department. Lost City personnel will coordinate with the responding agencies prior to operationalizing the solar facility to provide a tour and personnel training to improve familiarity with the Site and its equipment.

The training program for responding fire agencies/personnel will include thorough training regarding any site designations that are important for aiding emergency response to the Site. A formal written protocol and video recording of the protocol will be recorded. Training will be provided to emergency personnel on an annual basis and records will be maintained by the Emergency Services Coordinator.

Important considerations to be emphasized when responding to fire (or other emergency) at the Site include:

- Solar/substation components are always hot and should always be considered electrically energized.
- Before committing apparatus to the access roads within any of the fenced panel array enclosures, understand that turnarounds will often be well over 1,000 feet away.
- Under the direction of the Site Operator, isolate or shut down the electrical power at the site of the fire, if possible.



Wildfire and Extreme Weather Response

Severe weather events such as snowstorms, tornadoes, and severe thunderstorms are possible at the Project. Although much less common, there is also the potential for minor earthquakes, flooding, and high wind events. The Project is constructed and designed to withstand elements of extreme weather likely to occur, such as high winds, hail, and lightning. In the event of a natural disaster or severe weather event where advance warning may be limited, the Site Operator will take reasonable action to prepare for the event to address environmental exposure and the securing of equipment, consistent with the event conditions. Under no circumstances are personnel to place themselves in harm's way. The following list represents actions that should be taken at the Project Site for it to be secured, it is not intended to be all inclusive and might vary in applicability.

- Ensure all personnel evacuate if there are unsafe conditions.
- Ensure site personnel are safe and accounted for.
- Secure plant equipment as necessary and as weather conditions permit, noting to properly follow established guidelines to safeguard personnel while working outdoors in preparation for severe weather.
- Seek safe shelter. If in your vehicle in winter, ensure an emergency and first aid kit and enough gas is in place.
- Ensure all portable equipment is stored indoors.
- Make a general housekeeping inspection and ensure that all loose objects and debris that could potentially become airborne are secured or inside.

If an off-site wildfire threatens the facility while personnel are on site, evacuate the Project Site. If it is safe to do so, meet at a predetermined location to ensure that all personnel have safely evacuated.

Site Design Mitigation Measures

Through the implementation of Project Site design features, the risk of on-site and off-site fire can be reduced. These features may either be implemented once or will require regular/prescribed maintenance. Design considerations are described below.

Defensible Space and Vegetation Management

The Project will provide defensible space by setting back all PV modules a minimum of 20-feet from the solar facility's fence and modifying the fuels on-site by managing vegetation to a height of 18 inches, or, in the case of the perimeter firebreak road, minimizing vegetation.



Roadway-Adjacent Defensible Space

An area three feet from each side of the perimeter access road/firebreak shall be maintained to minimize vegetation. This area shall be maintained by the property owner, Lost City Renewables.

Roadway Design and Access

Vertical Clearance

Minimum vertical clearance of 14 feet will be maintained for the perimeter access road.

Grade

Road grades will not exceed 10%, especially on aggregate road surfaces.

Surface

All internal fire access road surfaces and driveways will be improved all-weather surfaces capable of supporting travel by minimum 50,000-pound apparatus.

Gates

The gate at the entrance to the Site shall be equipped with an approved emergency keyoperated switch overriding all function commands and opening the gate. The site will be completely fenced with a chain link and barbed wire fence. Gates on all other access roads will be provided with a fire-accessible padlock.

Pedestrian gates will be provided on each side (north, south, east, and west) of the Site's perimeter fence at spacing acceptable to the fire authority. Pedestrian gates will include fire accessible padlocks.