

March 23, 2021

Tanowa Troupe
Ohio Power Siting Board
Secretary, Administration/Docketing
180 E. Broad Street, 11th Floor
Columbus, OH 43215

Re: In the Matter of the Application of Hecate Energy Highland 4, LLC's Application for a Certificate of Environmental Compatibility and Public Need to Construct a Solar-Powered Electric Generating Facility in Clay and Whiteoak Townships in Highland County, Ohio Case No. 20-1288-EL-BGN/Compliance with Condition #16 Regarding Frack-Out Contingency Plan

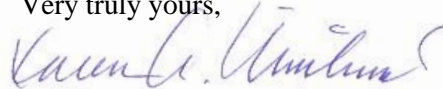
Dear Ms. Troupe:

On March 18, 2021, Hecate Energy Highland 4, LLC ("Hecate Energy") was issued a certificate of environmental compatibility and public need ("Certificate") by the Ohio Power Siting Board ("Board") to construct a 65 MW solar-powered electric generating facility in Clay and Whiteoak Township, Highland County, Ohio. The Certificate was issued subject to twenty (23) conditions.

At this time, Hecate Energy is filing the frac-out contingency plan applicable to any horizontal directional drilling that is used for New Market Solar I.

With this filing, Hecate Energy will have complied with Condition #16 of the Certificate. If you have questions or need additional information, please do not hesitate to call.

Very truly yours,



Karen A. Winters

cc: Patti Shorr, Hecate Energy LLC
Jared Wren, Hecate Energy LLC
Danelle Gagliardi, Squire Patton Boggs (US) LLP

Inadvertent Return Contingency Plan for Horizontal Directional Drilling (HDD)

Hecate New Market I and II Solar Project



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1 INTRODUCTION

This Inadvertent Return Contingency Plan (Plan) provides specific procedures and steps to contain the inadvertent releases of drilling mud, commonly called “frac-outs”, for water bodies that are crossed using horizontal direction drilling (HDD) techniques. Directional drilling operation have the potential to release drilling fluids into the surface environment through fractures in the bedrock and substrate. Drilling mud is largely composed of bentonite clay and water and is not considered toxic or hazardous. However, bentonite clay does have the potential to impact aquatic communities if released into surface waters. The objectives of this Plan are to:

1. Minimize the potential for frac-outs.
2. Guidance for early detection of frac-outs.
3. Protect nearby sensitive resources.
4. Provide guidance for timely response and containment of drilling mud in the event of an inadvertent return.
5. Advise clean up procedures.
6. Provide information on agency notification.

DRILLING FLUIDS

The HDD process involves the use of a drilling fluid (also referred to as drilling mud) made up primarily of water. Bentonite clay, a naturally occurring, nontoxic, inert substance, is added to the water and is pumped through the center of the drill pipe to the cutters. The HDD operation is a closed system to minimize the discharge of drilling mud, fluids, and cuttings outside of the work area.

2 CONTRACTOR RESPONSIBILITIES

The HDD site supervisor/foreman shall be familiar with all aspects of the HDD activity, the contents of this Plan, and has the responsibility of overseeing and implementing the Plan. The supervisor/foreman shall have a copy of this Plan and ensure that the Plan is available (onsite) and accessible to all personnel. All employees must be trained prior to the commencement of drilling activities on necessary monitoring and response procedures in the event of a frac-out.

TRAINING

Prior to the state of construction and drilling activities, the contractor shall provide training to all crew members on the following:

- The contents of the Inadvertent Return Contingency Plan.
- Inspection procedures for monitoring the worksite for frac-outs.
- The contractor’s obligation to halt drilling activities in the event a release is identified.
- The procedures and responsibilities of crew members in the event of a release.
- Protocols for communication with applicable agency and project representatives.

3 EQUIPMENT AND SPILL PREVENTION

The Contractor will be equipped with materials onsite to locate and contain inadvertent returns. The site supervisor/foreman must oversee and ensure the following:

- Equipment and vehicles must be inspected daily for leaks and maintained regularly to ensure good working order to prevent leaks.
- Spill kits and containment materials are available and on-site at all times.
- Equipment required to contain and clean up a frac out are available. These materials may include:
 - Straw or bales with stakes
 - Silt fence
 - Sandbags
 - Shovels
 - Pumps along with appropriate fuel and containment
 - Rolled impermeable plastic/Geotech sheeting
 - On-call vacuum truck
 - Light tower in the event operations are needed after dark

4 MONITORING

All members of the drilling crew and other personnel onsite will be responsible for monitoring and detecting frac-outs. Frac outs and returns of mud are easily identified visible pooling of drilling mud on the surface. The drill path and surrounding buffer should be continually monitored and visually inspected for the presence of drill mud on the surface. Drilling and mud system personnel will observe the volume of drilling fluid return and must immediately report reductions to the foreman or supervisor. The sudden decrease in mud volume returns during drilling operations, or loss in drilling mud pump pressure is an indication that drilling fluids are being inadvertently released.

5 RESPONSE, CONTAINMENT, AND CLEANUP

Once a frac-out has been identified, the response shall be immediate and in accordance with the procedures identified in this Plan. The following procedures must be implemented:

1. Immediately inform the site supervisor/foreman.
2. Determine the extent and severity of the mud release.
3. Install perimeter containment around the immediate spill with a buffer area.
4. If the mud release is small, containable, and **not impacting an environmentally sensitive area**, drilling activities may continue with constant monitoring of the initial release location, the surrounding area, and the drill mud pressure.
5. If the spill is large, significant, or impacting an environmentally sensitive area, directional drilling activities must be immediately suspended and:
 - a. The drill will be temporarily retracted to relieve pressure.

- b. Reduce circulation pressure and evaluate the circumstances leading to circulation loss to determine if the fracture can be sealed.
- c. Thicken the drilling fluid to attempt to seal off the location of the release as practical.
- d. The site supervisor will assess the situation and determine if the drill can continue or if an alternate plan is necessary.
- e. Project personnel will be notified.

In cases of inadvertent releases to open water or flooded wetlands, it may be impractical or impossible to contain the release. For releases in shallow water, the HDD contractor will install staked sediment barriers in attempt to contain. Removal by vacuum truck may be attempted if deemed appropriate. The decision to proceed with the drilling operation will be at the discretion of the owner after all practical methods to seal off the location of the discharge have been attempted. The project owner will notify the appropriate authorities for downstream water intakes. Open and flowing waterbodies will be observed for the presence of release plumes. Water sampling equipment may be needed to evaluate turbidity levels.

6 FINAL CLEANUP

The final clean-up shall commence after the release is contained. Clean-up shall include:

- Removal of all visible drilling fluid located in accessible areas. Removal methods will vary based on the volume of the release and the site-specific conditions. Removal equipment may include vacuum trucks, loader and track hoe buckets, small pumps, shovels and buckets.
- The recovered drilling fluid/mud will either be recycled or hauled to an approved location for disposal. No recovered drilling fluids will be discharged to streams, storm drains, or any other water source.
- All areas requiring excavation for clean up will be returned to pre-construction contours, using clean fill, as appropriate.
- All contaminated containment measures (silt fence, wattles, straw bales, etc.) will be removed and disposed of after the drilling activities have been completed and the area stabilized.

7 AGENCY NOTIFICATION

If an inadvertent release is discovered, steps will be taken to contain the release as described in the Plan. The contractor is responsible for notifying the Owner of inadvertent releases. The Owner is responsible for contacting regulatory agencies. When monitoring indicates that an in-stream release has occurred, the Owner representative will immediately notify the appropriate Federal and State Agencies as soon as possible. The nature of the release will be described, and corrective actions will be detailed. The notified agencies will determine whether the implementation of additional measures is required. Relevant contact information will be gathered prior to commencement of construction operations and maintained on site as part of the project specific notification protocol.

This foregoing document was electronically filed with the Public Utilities

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in

Case No(s). 20-1288-EL-BGN

Summary: Notification Compliance with Condition No. 16 of Certificate (Frack-Out Contingency Plan) electronically filed by Ms. Karen A. Winters on behalf of Hecate Energy Highland 4 LLC