Wetland and Stream Delineation Report

Bright Mountain Solar

Perry County, Kentucky

Prepared for:



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1.0 INTRODUCTION

On the behalf of Bright Mountain Solar, LLC (Bright Mountain), Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) conducted an on-site wetland and stream delineation and subsequently prepared this *Wetland and Stream Delineation Report*, which summarizes the results of on-site delineations for the Bright Mountain Solar Project (the Project).

1.1 Project Location and Description

Bright Mountain Solar, LLC (Bright Mountain) is proposing to construct an 80-megawatt (MW) solar-powered electric generation facility and associated interconnection transmission (gen-tie) line located outside of the City of Hazard in Perry County, Kentucky (Figure 1, Appendix A). The Project will be located on privately-owned land leased to Bright Mountain with an approximate facility footprint of 360 acres located entirely on a reclaimed coal mine surrounded by forested mountain peaks (Figure 2). In addition to photovoltaic (PV) panel arrays and support structures, Project components will consist of access roads, a collection substation, an operations and management (O&M) building, and construction laydown yards.

Wetland and stream delineations were conducted in April and September 2022, and May 2023. The Study Area includes 714 acres, which encompasses the entirety of the Project facility footprint and gen-tie line corridor as described above (Figure 3). The area consists of open, grassy fields associated with the reclaimed mine and steep, forested hillsides in areas adjacent to the reclaimed mine.

1.2 Purpose

The purpose of this study was to delineate and describe all on-site wetlands and streams that occur within the Study Area and their anticipated state and/or federal jurisdiction. Specific tasks performed for this study included: 1) reviewing background resource data/mapping, 2) field delineating and flagging wetlands and streams, 3) surveying delineated wetland and stream boundaries using a Global Positioning System (GPS) unit, 4) quantifying the area of on-site wetlands and streams, and 5) describing delineated wetlands and streams based on hydrology, vegetation, soils and/or other data collected in the field.

This report describes the relevant regulatory authorities and potential permits required, summarizes the desktop review, and presents the results of the on-site wetland and stream delineations conducted by EDR. This report also provides necessary information to support any jurisdictional determinations by, and/or related permit applications to, the U.S. Army Corps of Engineers (USACE) and/or the Kentucky Energy and Environment Cabinet, Department of Water (DOW), along with other surface water impact evaluations that may be required for the Project.

2.0 REGULATORY AUTHORITIES AND PERMITS

Wetlands, streams, and other surface water features are regulated by both federal and state authorities. This section discusses the regulatory framework for surface water permitting in Kentucky.

2.1 Waters of the United States

In accordance with Section 404 of the Clean Water Act (CWA), the USACE has regulatory jurisdiction over waters of the United States (WOTUS). According to the USACE, WOTUS includes lakes, ponds, streams (as defined by an ordinary high water mark [OHWM]), tidal waters, and wetlands. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] § 328.3). Such areas are indicated by the presence of three conditions: 1) a dominance of hydrophytic vegetation, 2) the presence of hydric soils, and 3) evidence of wetland hydrology during the growing season (Environmental Laboratory 1987).

The Clean Water Rule: Definition of "Waters of the United States" (the 2015 Rule), effective August 28, 2015 (USACE & USEPA 2015), was adopted to provide a more clear and consistent approach to defining the scope of the CWA and WOTUS. On December 30, 2022, the USEPA and USACE announced a final rule founded upon the pre-2015 definition of WOTUS and updated to reflect consideration of Supreme Court decisions, the scientific record, and the agencies' technical expertise. The Revised Definition of "Waters of the United States" (the 2023 Rule) became effective on March 20, 2023 (USACE & USEPA 2023). This updated definition of the WOTUS included seven jurisdictional categories (Table 1) and eight categories that were specifically not considered WOTUS (Table 2).

Table 1. Jurisdictional Waters as Defined in the 2023 Rule

Water Type	Regulatory Definition
Traditional navigable water (TNW)	A waterbody that is "navigable-in-fact." TNWs include large rivers and lakes that could be used in interstate or foreign commerce, as well as waterbodies affected by tides.
Territorial seas	Territorial seas that extend three miles out to sea from the coast.
Interstate waters	Waters such as streams, lakes, or wetlands that cross or form part of state boundaries.
Impoundments of WOTUS	Impoundments created by impounding one of the WOTUS that was jurisdictional under this rule's definition at the time the impoundment was created, and impoundments of waters that at the time of assessment meet the definition of WOTUS under the rule as a TNW, the territorial seas, interstate water, jurisdictional tributary, or jurisdictional adjacent wetland, regardless of the water's jurisdictional status at the time the impoundment was created.
Tributaries to TNWs, territorial seas, interstate waters, or impoundments	Branches of creeks, streams, rivers, lakes, ponds, ditches, and impoundments that ultimately flow into TNWs, the territorial seas, interstate waters, or impoundments of jurisdictional waters. Tributaries are jurisdictional if they meet either the relatively permanent standard or significant nexus standard. ¹
Adjacent wetlands ²	Wetlands adjacent to TNWs, the territorial seas, or interstate waters. Wetlands with a continuous surface connection to relatively permanent impoundments or to jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard, and wetlands adjacent to impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard.
Other waters	Intrastate lakes and ponds, streams, or wetlands that are not identified in the categories above but do meet either the relatively permanent standard or the significant nexus standard.

¹ The relatively permanent analysis identifies relatively permanent, standing, or continuously flowing waters connected to WOTUS, and waters with a continuous surface connection to such relatively permanent waters or to TNWs, the territorial seas, or interstate waters. The significant nexus analysis considers waters that, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of WOTUS.

² A wetland is defined as adjacent when: (1) an unbroken surface or shallow subsurface connection to a jurisdictional water can be established (e.g., wetland abuts or is connected via a pipe, culvert, non-jurisdictional ditch, or flood gate); (2) the wetland is physically separated from a jurisdictional water by constructed dikes or barriers, or natural landforms (e.g., river berms, beach dunes); or (3) the wetland's proximity to a jurisdictional water is reasonably close such that adjacent wetlands have significant effects on water quality and the aquatic ecosystem.

Table 2. Non-Jurisdictional Waters as Defined in the 2023 Rule

Water Type	Regulatory Definition
Waste treatment systems	Treatment ponds or lagoons, designed to meet the requirements of the CWA.
Prior converted cropland	Designated by the Secretary of Agriculture, recognized by the USEPA and USACE. Refers to areas that, prior to December 23, 1985, were drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. When prior converted cropland is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years, it is considered abandoned and no longer constitutes prior converted cropland for purposes of the CWA. Final authority regarding CWA jurisdiction in prior converted cropland remains with the USEPA.
Ditches (including roadside ditches)	Excavated wholly in, and draining only, dry land and that do not carry a relatively permanent flow of water.
Artificially irrigated areas	Areas that would revert to dry land if the irrigation ceased.
Artificial lakes or ponds	Created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
Artificial reflecting or swimming pools or other small ornamental bodies of water	Created by excavating or diking dry land to retain water for primarily aesthetic reasons.
Waterfilled depressions	Created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of WOTUS.
Swales and erosional features	Gullies or small washes characterized by low volume, infrequent, or short duration flow.

On May 25, 2023, the Supreme Court issued a decision in the Sackett v. USEPA case that narrowed the scope of federally protected wetlands according to the CWA. In the court's decision, the significant nexus test has been rejected, leaving in place a narrower definition based on the relatively permanent test. In writing for the majority in the Sackett v. USEPA case, Justice Alito determined that the CWA applies to only those wetlands "with a continuous surface connection to bodies that are waters of the United States in their own rights." This likely means only wetlands that abut a relatively permanent water would be considered WOTUS. Although not explicitly addressed in the case, this decision effectively nullifies the 2023 Rule; however, no official guidance or communication has been issued by the USEPA or the USACE as of the time this report

was prepared. It is anticipated that this decision will result in the USEPA and USACE revising the definition of WOTUS.¹

A Section 404 permit from the USACE is required for activities that result in the placement of dredged or fill materials in WOTUS. In addition, Section 10 of the Rivers and Harbor Act requires a permit from the USACE to construct any structure in, under, or over any TNW, as well as any proposed action that would alter or disturb these waters (such as excavation/dredging or deposition of materials).

2.2 Kentucky State Wetlands and Streams

The Kentucky Division of Water (DOW) administers the CWA Section 401 Water Quality Certification (WQC) program. Any activity that results in dredging or placement of fill in wetlands or surface waters and requires authorization by a Nationwide or Individual Permit from the USACE may be subject to DOW review and authorization. Title 401 Chapter 010 of Kentucky Administrative Regulations (401 KAR 10) consists of Kentucky's water quality standards, with definitions provided in Section 001. Wetlands are defined in 401 KAR 10:001(77) by referring to the federal definition found in 40 CFR 122.2; therefore, the state definition includes areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Surface waters are defined in 401 KAR 10:001(72) as constantly or intermittently flowing waters with well-defined banks and beds; lakes and impounded waters; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface.

Kentucky also considers federally non-jurisdictional, isolated wetlands to be "Waters of the Commonwealth" (Kentucky Division of Water 2020). The DOW has expressed a need for state regulations for protection of Waters of the Commonwealth; however, there is no state permitting program for isolated wetlands. Additionally, isolated wetlands are not jurisdictional WOTUS and are therefore not subject to WQC issuance (Kentucky Division of Water 2020).

In addition to WQC, a floodplain permit from DOW may be required for stream crossings or development in areas along streams, pursuant to Kentucky Revised Statutes (KRS) 151.250. Typical activities requiring a permit include, but are not limited to, residential and commercial structures, stream crossings, fill, stream alterations and relocations, excavation, grading, and small stream impoundments. State floodplain development requirements are outlined in 401 KAR 4:060, which defines a stream according to KRS 151.100(3) as any river, creek, or channel, having well defined banks, in which water flows for substantial periods of the year, or any lake or other body of water.

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¹ Since the Sackett v. USEPA case only addressed wetlands as WOTUS based on the significant nexus test, it is unclear how or if the definition of WOTUS may change for streams with regard to the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Interim Version* issued in November 2022 and included in determining jurisdiction based on the 2023 Rule. Additional guidance from the USEPA and USACE will be needed to determine jurisdiction.

3.0 REVIEW OF BACKGROUND DATA AND MAPPING

In preparation for the field delineations, EDR reviewed publicly available data related to physiography, soils, hydrology, and vegetation in the Study Area. Mapping and data were obtained from various state and federal agencies, including, but not limited to:

- U.S. Geological Survey (USGS) topographic mapping, Krypton 7.5 minute quadrangle (2021)
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping (2022)
- USGS National Hydrography Dataset (NHD) (2023)
- Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) Viewer (2022)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (2021b)
- Multi-Resolution Land Characteristics (MRLC) Consortium National Land Cover Database (NLCD) land cover and vegetation classes (2019)
- Recent aerial photography

3.1 Physiography and Soils

The Study Area is located within the Appalachian Plateaus physiographic province (NPS 2018). The topography in the vicinity of the Study Area consists of steep, rocky hillsides with narrow river valleys typical of Appalachian geography. The Study Area is on the site of a reclaimed coal mine and sits at elevations ranging from approximately 920 feet to 1,450 feet above mean sea level (USGS 2021). The topography of the Study Area has been substantially altered due to the mining and subsequent reclamation grading activities.

The NRCS Web Soil Survey for Perry County, Kentucky indicates six soil types mapped with in the Study Area, consisting primarily of silty or clay loams (NRCS 2021b). Table 3 lists the soil series mapped within the Study Area and their slope, drainage class, hydric rating, and hydric classification. The majority (82.3%) of mapped soils in the Study Area are part of the Fairpoint and Bethesda soil series (FaF) (Figure 4). Fairpoint and Bethesda soils are commonly found in mined areas and are well drained and stony (USDA 2012a, USDA 2012b). Other soil series mapped in less disturbed parts of the Study Area include Matewan-Marrowbone-Latham complex (DLF), Shelcoat-Cutshin-Gilipin complex (SCF), and Shelocta-Highsplint-Gilipin complex (uShgF). Small portions of the Udorthents-Urban land complex (uUdoC and uUdoD) exist along the gen-tie corridor near Hazard. These soils are all well-drained or moderately well drained, with soil textures ranging from coarse gravelly loam to fine clay loam.

Hydric soils form under conditions of saturation, flooding, or ponding with a duration during the growing season that allows anerobic conditions to develop in the upper part of the soil. These soils are often associated with the presence of wetlands. Hydric ratings and hydric soil classifications are based on information obtained from the NRCS Web Soil Survey (2021b). All soils mapped within the Study Area are listed as non-hydric with 0% of the soil unit hydric. Although soil series may have a hydric rating in the soil survey indicating non-hydric conditions, this information is for general use and does not supersede specific conditions documented in the field.

Soils in the Study Area are substantially impacted by coal mining activities that occurred historically in the area, potentially as early as the 1960s (Kentucky Energy and Environment Cabinet 2021). The most recent mine was Jakes Branch Job, mine permit number 897-0444, held by the Pine Branch Mining company (Kentucky Energy and Environment Cabinet 2021). A map of mined areas is provided in Appendix B. Reclamation activities in the area were completed in 2018, the reclamation bond was released in 2020, and the permit closed in 2022.

Table 3. Study Area Soils

Mapping Unit Symbol	Series	Percent of Study Area	Slope	Drainage ¹	Hydric Rating ²	Hydric Classification ³
FaF	Fairpoint and Bethesda	82.3	2–70%	WD	0%	Non-hydric
DLF	Matewan-Marrowbone-Latham	11.9	20–80%	MWD	0%	Non-hydric
SCF	Shelcoat-Cutshin-Gilipin	2.4	20–75%	WD	0%	Non-hydric
uShgF	Shelocta-Highsplint-Gilipin	2.2	20–70%	WD	0%	Non-hydric
uUdoC	Udorthents-Urban land complex	1.0	0-15%	WD	0%	Non-hydric
uUdoD	Udorthents-Urban land complex	0.1	15-35%	WD	0%	Non-hydric

¹ MWD = moderately well drained, WD = well drained

3.2 Hydrology

The Study Area is located entirely within the North Fork Kentucky River watershed (hydrologic unit code 05100201). The North Fork of the Kentucky River is approximately 0.1 to 0.3 mile west and south of the Study Area and flows northwest to the Kentucky River (Figure 5). Several drainage features and tributaries to the North Fork of the Kentucky River are mapped within the Study Area. Outside of these drainage features, surface water occurring within the Study Area is generated by direct precipitation and runoff from adjacent land.

3.2.1 Mapped Wetlands and Streams

Kentucky does not have a state data set for wetlands and streams, but rather utilizes the NWI and NHD datasets for monitoring and regulation. The NWI indicates the occurrence of 15 wetland features mapped within the Study Area, totaling 5.59 acres (Figure 5). The dominant NWI wetland community mapped in the Study Area is riverine wetlands associated with drainages on the reclaimed coal mine and stream valleys along the gen-tine corridor.

The NHD shows nine mapped streams in the Study Area that are all presumed to be tributaries to the North Fork Kentucky River based on area topography (Figure 5). Oliver Branch and two unnamed streams are mapped within the facility footprint. The gen-tie corridor portion of the Study Area crosses First Creek, Lower Second Creek, Pigeonroost Branch, Shinglepen Branch, and an unnamed tributary to Pigeonroost

² Map units are composed of one or more component soil types, each of which is individually rated as hydric or not hydric. The hydric rating, as provided in the USDA Web Soil Survey, indicates the percentage of the map unit that meets hydric criteria.

³ Hydric classification categories are based on the total percentage of hydric soils in the map unit. as listed on the USDA Web Soil Survey. Hydric = 100% map unit components rated as hydric. Predominantly hydric = 66% to 99% map unit components rated as hydric. Partially hydric = 33% to 66% map unit components rated as hydric. Predominantly non-hydric = up to 33% map unit components rated as hydric. Non-hydric = 0% map unit components rated as hydric.

Branch. While there are no TNWs mapped within the Study Area, the North Fork Kentucky River is considered a TNW (Kentucky Transportion Cabinet 2022, USACE Louisville District 2012).

3.2.2 Mapped Floodplains

According to FEMA mapping, a small portion of the Study Area along the gen-tie corridor is located within a mapped 100-year floodplain (Figure 6). The floodplain occurs along State Route 267 and is associated with the river valley of First Creek, a tributary to the North Fork Kentucky River to the south.

3.3 Mapped Vegetation

Land cover and vegetation occurring within the Study Area were evaluated using current NLCD mapping, (MRLC 2019). The Study Area encompasses approximately 714 acres, 77% of which is mapped as shrub/scrub (36%), barren land (22%), and herbaceous (19%) cover types primarily associated with the coal mine reclamation areas within the facility footprint, which is maintained through periodic mowing. The other 23% of the Study Area is mapped as deciduous forest (19%) and mixed forest on the hillsides, developed land associated with roads and residential areas, and hay/pastureland, primarily located along the gen-tie corridor. Vegetation mapped within the Study Area is summarized in Table 4 and illustrated on Figure 7.

Table 4. Vegetation/Land Cover Within the Study Area

Land Cover Class	Acres	Percentage of Study Area
Shrub/Scrub	259	36%
Barren Land	158	22%
Herbaceous	134	19%
Deciduous Forest	134	19%
Developed, Open Space	8	1.1%
Developed, Medium Intensity	8	1.1%
Mixed Forest	6	0.8%
Hay/Pasture	3	0.4%
Developed, Low Intensity	3	0.4%
Developed, High Intensity	1	0.1%
Total	714	100%

4.0 ON-SITE WETLAND AND STREAM DELINEATION

EDR conducted initial field delineations of wetlands and streams in the Study Area on April 12 - 14, 2022. Rainfall occurred each day of field delineation, with a total of 0.41 inches recorded. However, local precipitation was below the 20-year average for April of 2022. The total monthly precipitation for April during the period of 2001–2021 averaged 4.55 inches, while April 2022 had a total of 3.60 inches (NOAA 2023).

EDR conducted additional field delineations of wetlands and streams in the Study Area on September 20 - 22, 2022. Local precipitation was below the 20-year average for September. The total monthly precipitation for September during the period of 2001–2021 averaged 3.29 inches, while September 2022 had a total of 1.31 inches (NOAA 2023).

Final delineations were conducted in the Study Area on May 23 - 24, 2023, when the gen-tie line route was finalized. Local precipitation was significantly below the 20-year average for April and May of 2023. The total monthly precipitation for May during the period of 2002–2022 averaged 6.51 inches, while May 2023 had a total of 3.78 inches (NOAA 2023).

4.1 Methodology

The identification of wetland boundaries was based on the methodology described in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987). Determination of wetland boundaries was also guided by the methodologies presented in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, Version 2.0* (USACE 2012). Attention was given to the size of the wetland (including portions that extend outside the Study Area), evidence of disturbance, and the identification of potential hydrologic connections between other waters, as these factors could influence jurisdictional status. Wetland boundaries were defined in the field with sequentially numbered, pink surveyor's flagging and mapped using a GPS unit with reported sub-meter accuracy.

Delineated features were characterized according to the wetlands and deepwater habitats classification system used in NWI mapping (Cowardin, et al. 1979). Data were collected from sample plots in representative wetland cover types and recorded on USACE Routine Wetland Determination forms (Appendix C). The data collected at each delineated wetland includes dominant vegetation, hydrology indicators, and soil characteristics. Data to confirm upland areas were also collected adjacent to wetland boundaries and in areas where aerial photograph signatures or existing wetland mapping suggested potential wet conditions. Upland data points were also documented and recorded on USACE Routine Wetland Determination forms.

Wetland hydrology was evaluated based on the list presence of primary and secondary indicators. The Eastern Mountains and Piedmont *Regional Supplement* lists the following primary indicators of wetland hydrology: (A1) surface water, (A2) high water table, (A3) saturation, (B1) water marks, (B2) sediment deposits, (B3) drift deposits, (B4) algal mat or crust, (B5) iron deposits, (B7) inundation visible on aerial imagery, (B9) water-stained leaves, (B13) aquatic fauna, (B14) true aquatic plants, (C1) hydrogen sulfide odor, (C3) oxidized rhizospheres on living roots, (C4) presence of reduced iron, (C6) recent iron reduction

in tilled soils, and (C7) thick muck surface. Per the *Regional Supplement*, the presence of any one of these primary indicators is sufficient evidence that wetland hydrology is present. In addition, the *Regional Supplement* identifies the following secondary indicators to determine wetland hydrology: (B6) surface soil cracks, (B8) Sparsely vegetated concave surface, (B10) drainage patterns, (B16) moss trim lines, (C2) dryseason water table, (C8) crayfish burrows, (C9) saturation visible on aerial imagery, (D1) stunted or stressed plants, (D2) geomorphic position, (D3) shallow aquitard, (D4) microtopographic relief, and (D5) results of the FAC-neutral test. In accordance with the *Regional Supplement*, in the absence of a primary indicator, the presence of two of these secondary indicators is considered a suitable indication of wetland hydrology.

Wetland vegetation is indicated by a dominance of hydrophytic plant species, or species that have adapted to grow in areas of inundation and soil saturation (Environmental Laboratory 1987). Assessment of vegetation focused on the identification of dominant plant species in four categories: trees (greater than or equal to 3 inches diameter at breast height), saplings/shrubs (less than 3 inches diameter at breast height and greater than 3.2 feet tall), herbs (all vegetation less than 3.2 feet tall), and woody vines. Dominance was determined by visually estimating those species having the greatest absolute percent cover within each stratum. Vascular plant nomenclature and wetland indicator status for dominant plant species were determined by the Wildnote field data collection application, which refers to the USDA PLANTS Database (NRCS 2021a) and the National Wetland Plant List, an interagency effort compiled by the USACE (2020). The indicator status represents a plant's likelihood of occurring in wetlands. The five indicator statuses and their probability of being observed in a wetland are as follows:

- Obligate (OBL): Plants occur within wetlands more than 99% of the time
- Facultative Wetland (FACW): Plants occur within wetlands 67 to 99% of the time
- Facultative (FAC): Plants occur within wetlands 33 to 67% of the time
- Facultative Upland (FACU): Plants occur within wetlands 1 to 33% of the time
- Upland (UPL): Plants occur within wetlands less than 1% of the time

Those plant species that are not assigned an indicator status in the National Wetland Plant List are assumed to always be found in uplands and assigned an indicator status of UPL. Wetlands are indicated by a dominance and/or prevalence of hydrophytic plant species (i.e., those assigned an indicator status of OBL, FACW, or FAC).

Hydric soils are those that are poorly drained and are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil layer. The presence of hydric soils is indicative of the possible presence of wetlands (Environmental Laboratory 1987). Hydric soil conditions were determined in the field through observation of soils composition, color, and morphology. Soil data were collected by using a Dutch auger and tiling spade to examine the soil profile. Soil colors were determined using Munsell Soil Charts (Munsell Color 2009). Information concerning soil series, color, texture, and matrix and concentration color was recorded at each sample location and used to determine whether the soils displayed hydric characteristics.

Streams were identified according to the Cowardin et al. (1979) classification system, and stream boundaries were determined based on the presence of OHWM characteristics, including a "clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris" (33 CFR 329.11). Stream boundaries were defined and mapped in the field using the same method as described above for wetlands. Stream flow regime (i.e., perennial, intermittent, or ephemeral) was determined through evaluation of hydrologic, geomorphic, and biological characteristics (NC DWQ 2010). Data regarding stream gradient (gentle, moderate, or steep), stream bank and channel width, water depth, stream bed substrate, in-stream cover, and biological indicators were collected and recorded on stream inventory forms (Appendix C).

4.2 Results

EDR personnel identified 42 wetlands and 38 streams within the Study Area (Figure 8). The data collected at each delineated wetland and stream are summarized in Table 5 and Table 6, respectively. Representative photos are included in Appendix D. In accordance with the Cowardin et al. (1979) classification system, the waters delineated within the Study Area consist of the following community types: palustrine emergent wetland (PEM), palustrine forested wetland (PFO), palustrine scrub shrub wetland (PSS), perennial stream (R3), intermittent stream (R4), and ephemeral stream (R6). No TNWs were identified within the Study Area. Descriptions of the delineated wetlands, streams, and upland verification points are included in Sections 4.2.1, 4.2.2, and 4.2.3, respectively.

Table 5. Delineated Wetlands

Wetland Delineation	Wetland	Acreage Area by T		Study	Present in Latitude of		Longitude of	Anticipated Federal	Rationale for Federal	Figure 8 Sheet
ID ¹	PEM	PFO	PSS	Total	Wetland ³	Centroid	Centroid	Jurisdiction ⁴	Jurisdiction ⁵	Number
05-W001	0.05	-	-	0.05	-	37.2902	-83.3099	No	Isolated	3
05-W002	0.09	1	-	0.09	05-ST001, 05-ST002	37.2892 -83.3100		Yes	Abutting WOTUS	3
05-W003	0.04	-	-	0.04	-	37.2892	-83.3026	No	Isolated	3
05-W004	0.24	-	-	0.24	-	37.2883	-83.3021	No	Isolated	3
05-W005	0.05	-	-	0.05	-	37.2878	-83.2980	No	Isolated	4
05-W006	0.02	-	-	0.02	-	37.2880	-83.2975	No	Isolated	4
05-W007	0.03	-	-	0.03	-	37.2865	-83.2982	No	Isolated	4,5
05-W008	0.01	-	-	0.01	-	37.2843	-83.2979	No	Isolated	5
05-W009	0.03	-	-	0.03	-	37.2816	-83.2990	No	Isolated	5
05-W010	0.09	-	-	0.09	-	37.2871	-83.2948	No	Isolated	4,5
05-W011	0.01	-	-	0.01	-	37.2914	-83.2922	No	Isolated	2,4
05-W012	0.02	-	-	0.02	-	37.2924	-83.2932	No	Isolated	2
05-W013	0.01	-	-	0.01	-	37.2912	-83.2937	No	Isolated	4
05-W014	0.15		-	0.15	-	37.3042	-83.2871	No	Isolated	1
05-W015	0.02	-	-	0.02	-	37.2911	-83.2843	No	Isolated	6
05-W016	0.01	-	-	0.01	05-ST006	37.2924	-83.2824	No	Isolated, ephemeral stream connection	6,7
05-W017	0.02	-	-	0.02	-	37.2931	-83.2829	No	Isolated	7
12-W001	-	-	0.05	0.05	12-ST004	37.2909	-83.2472	No	Isolated	11
13-W001	-	-	- 0.38 0.38 13-ST002, 13-ST002A 783.2787 Yes		Yes	Abutting WOTUS	7			
13-W002	-	0.07	-	0.07	-	37.2986	-83.2769	No	Isolated	7,8
13-W003	0.10	-	-	0.10	13-ST006	37.3030	-83.2709	Yes	Abutting WOTUS	9
13-W004	0.20	-	_	0.20	13-ST007, 13-ST008	37.3040	-83.2697	Yes	Abutting WOTUS	9
13-W005	0.04	-	-	0.04	13-ST010	37.2915	-83.2358	Yes	Abutting WOTUS	12
14-W001	0.30	-	-	0.30	-	37.2913	-83.3089	No	Isolated	3
14-W002	0.02	-	-	0.02	-	37.2882	-83.2910	No	Isolated	4

Table 5. Delineated Wetlands

Wetland Delineation	Wetland A	Acreage Area by T		Study	Stream Present in	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁴	Rationale for Federal Jurisdiction ⁵	Figure 8 Sheet Number
ID ¹	PEM	PEM PFO		Total	Wetland ³	Centrola	Centrola	Julisaletion	Julisalction	Number
14-W003	0.02	-	-	0.02	-	37.2881	-83.2911	No	Isolated	4
14-W004	0.08	-	-	0.08	-	37.2899	-83.2904	No	Isolated	4
14-W005	0.16	-	-	0.16	-	37.2896	-83.2852	No	Isolated	6
14-W006	0.04	-	-	0.04	-	37.2962	-83.2868	No	Isolated	2
14-W007	0.02	-	-	0.02	-	37.3044	-83.2865	No	Isolated	1
14-W008	0.02	-	-	0.02	-	37.2895	-83.2883	No	Isolated	4
14-W009	0.05	-	-	0.05	-	37.2892	-83.2887	No	Isolated	4
14-W010	0.03	-	-	0.03	-	37.2893	-83.2876	No	Isolated	4
14-W011	0.03	-	-	0.03	14-ST004	37.2906	-83.3024	No	Isolated, ephemeral stream connection	3
14-W012	0.09	-	-	0.09	-	37.2911	-83.3009	No	Isolated	3
14-W013	0.04	-	-	0.04	-	37.2970	-83.2934	No	Isolated	2
14-W014	0.15	-	-	0.15	-	37.2925	-83.2870	No	Isolated	2
14-W015	0.04	-	-	0.04	-	37.2986	-83.2849	No	Isolated	1,7
66-W001	0.01	-	-	0.01	66-ST005	37.2950	-83.2541	Yes	Abutting WOTUS	10,11
66-W002	0.01	-	-	0.01	-	37.2949	-83.2540	No	Isolated	10,11
66-W003	0.17		-	0.17	66-ST003	37.2942	-83.2532	Yes	Abutting WOTUS	11
66-W004	0.02	-	-	0.02	66-ST004	37.2902	-83.3099	Yes	Abutting WOTUS	10,11
Totals	2.53	0.01	0.43	3.03						

¹ Field ID assigned by EDR

² Wetland community types are based upon the Cowardin et al. (1979) classification system: open water wetland (POW), palustrine emergent wetland (PEM), palustrine forested wetland (PFO), palustrine scrub-shrub wetland (PSS); only PEM and PFO community types were observed in the Study Area

³ Delineation IDs in this column indicate the stream ID assigned by EDR in the field

⁴ Based on visual observation of hydrologic connectivity in the field and review of available spatial data; final jurisdictional determination to be made by the USACE

⁵ Based on the May 25, 2023 Sackett v. USEPA decision

Table 6. Delineated Streams

Delineation ID ¹	Linear Feet of Stream Within Study Area	Stream Type ²	Stream Name ³	Stream Order ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Jurisdiction ⁶	Figure 8 Sheet Number
05-ST001	84	R4	UNT	1	37.2890	-83.3099	Yes	Tributary to TNW	3
05-ST002	107	R6	UNT	1	37.2893	-83.3098	No	Drainage Feature, No OHWM	3
05-ST003	182	R6	UNT	1	37.2834	-83.2998	No	Drainage Feature, No OHWM	5
05-ST004	1,386	R6	UNT	1	37.2831	-83.2994	No	Drainage Feature, No OHWM	5
05-ST005	460	R4	UNT	1	37.2909	-83.2966	Yes	Tributary to TNW	2,4
05-ST006	69	R6	UNT	1	37.2923	-83.2823	No	Drainage Feature, No OHWM	6,7
12-ST001	118	R4	Pigeon Roost Branch	3	37.3032	-83.2612	Yes	Tributary to TNW	9
12-ST002	205	R3	First Creek	3	37.2875	-83.2383	Yes	Tributary to TNW	12
12-ST003	80	R4	UNT	1	37.2877	-83.2385	Yes	Tributary to TNW	12
12-ST004	73	R4	UNT	1	37.2909	-83.2470	No	Isolated	11
13-ST001	75	R6	UNT	1	37.2957	-83.2788	No	Drainage Feature, No OHWM	7
13-ST002	103	R4	UNT	2	37.2957	-83.2789	Yes	Tributary to TNW	7
13-ST002A	71	R4	UNT	1	37.2957	-83.2787	Yes	Tributary to TNW	7
13-ST003	180	R4	UNT	1	37.2992	-83.2761	Yes	Tributary to TNW	8
13-ST004	103	R3	UNT	1	37.2994	-83.2758	Yes	Tributary to TNW	8
13-ST005	54	R4	UNT	2	37.2998	-83.2753	Yes	Tributary to TNW	8
13-ST005A	107	R6	UNT	1	37.2998	-83.2750	No	Drainage Feature, No OHWM	8
13-ST005B	189	R3	UNT	2	37.2995	-83.2755	Yes	Tributary to TNW	
13-ST006	104	R3	UNT	1	37.3029	-83.2712	Yes	Tributary to TNW	9
13-ST007	100	R3	UNT	1	37.3040	-83.2696	Yes	Tributary to TNW	9
13-ST008	150	R4	UNT	1	37.3042	-83.2699	Yes	Tributary to TNW	9

Table 6. Delineated Streams

Delineation ID ¹	Linear Feet of Stream Within Study Area	Stream Type ²	Stream Name ³	Stream Order ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Jurisdiction ⁶	Figure 8 Sheet Number
13-ST009	273	R4	UNT	1	37.3044	-83.2688	Yes	Tributary to TNW	9
13-ST010	456	R4	UNT	1	37.2922	-83.2367	Yes	Tributary to TNW	12
13-ST011	51	R4	UNT	1	37.2921	-83.2369	Yes	Tributary to TNW	12
13-ST012	50	R6	UNT	1	37.2914	-83.2356	No	Drainage Feature, No OHWM	12
13-ST013	116	R3	UNT	1	37.2915	-83.2817	Yes	Tributary to TNW	6
13-ST014	103	R3	Shinglepen Branch	1	37.2927	-83.2800	Yes	Tributary to TNW	6,7
14-ST001	817	R6	UNT	1	37.2841	-83.2989	No	Drainage Feature, No OHWM	5
14-ST002.1	615	R6	Oliver Branch	3	37.2911	-83.2956	No	Drainage Feature, No OHWM	2,4
14-ST002.2	142	R4	Oliver Branch	1	37.2917	-83.2967	Yes	Tributary to TNW	2,4
14-ST003	530	R4	UNT	2	37.2919	-83.2968	Yes	Tributary to TNW	2,4
14-ST004	357	R6	UNT	1	37.2905	-83.3021	No	Drainage Feature, No OHWM	3
66-ST001	36	R4	UNT	1	37.2964	-83.2559	Yes	Tributary to TNW	10
66-ST002	160	R3	Lower Second Creek	3	37.2952	-83.2543	Yes	Tributary to TNW	10,11
66-ST003	209	R4	UNT	1	37.2945	-83.2536	Yes	Tributary to TNW	10,11
66-ST004	214	R4	UNT	1	37.2948	-83.2535	Yes	Tributary to TNW	10,11
66-ST005	353	R4	UNT	2	37.2947	-83.2541	Yes	Tributary to TNW	10,11
66-ST006	592	R4	UNT	1	37.2890	-83.2366	Yes	Tributary to TNW	12

¹ Field ID assigned by EDR

² Stream type is based upon the Cowardin et al. (1979) classification system: perennial stream (R3), intermittent stream (R4), and ephemeral stream (R6)

³ UNT = unnamed tributary

⁴ Using Strahler method, in which stream order increases when streams of the same order converge

⁵ Based on the May 25, 2023 Sackett v. USEPA decision; see Section 2.1 for more information

⁶ Based on the May 25, 2023 Sackett v. USEPA decision

4.2.1 Wetlands

As discussed above, wetlands found in the Study Area consisted of PEM, PSS, and PFO communities. For all delineated wetlands within the Study Area, Table 5 indicates the acreage occupied by each community type. The following is a summary of the characteristics of these wetlands, many of which were unique due to substantial soil disturbance from past mining and mine reclamation activities, as previously described, or correspond with roadside drainage systems. The mine reclamation activities compacted the rocky soils throughout the facility footprint portion of the Study Area, which resulted in pooling of surface water in various areas.

Palustrine Emergent Wetlands (PEM) – (Photos 67 through 86, 93 through 127 in Appendix D)

A total of 39 wetlands delineated within the Study Area contained persistent emergent vegetation. These wetlands were typically located in depressional areas throughout the reclaimed coal mine area. Uneven grading and soil compaction from reclamation activities created areas for surface water to accumulate and wetlands to develop. However, most of these areas do not have a direct surface water connection to any jurisdictional waters.

The emergent wetlands on site were characterized by the dominance of erect, rooted, herbaceous wetland plants, including broadleaf cattail (*Typha latifolia*), narrow leaf cattail (*Typha angustifolia*), curly dock (*Rumex crispus*), soft rush (*Juncus effusus*), deer-tongue rosette grass (*Dichanthelium clandestinum*), common rush (*Juncus pylaei*), woolgrass (*Scirpus cyperinus*), spotted jewelweed (*Impatiens capensis*), smooth goldenrod (*Solidago gigantea*), and broomsedge bluestem (*Andropogon virginicus*). Vegetation was also significantly disturbed at most of the wetlands identified in the western portion of the Study Area, due to regular mowing.

Indicators of wetland hydrology in the emergent wetlands included standing surface water (A1), soil saturation (A3), inundation visible on aerial imagery (B7), water-stained leaves (B9), and oxidized rhizospheres on living roots (C3). Secondary indicators were also observed and included drainage patterns (B10), geomorphic position (D2), and results of the FAC-neutral test (D5). Three of the delineated PEM wetlands were connected to delineated streams (three ephemeral and one intermittent) that drain to the North Fork of the Kentucky River and its tributaries. Wetland 05-W002 was formed as a result of a hillside seep that drained to streams 05-ST001 and 05-ST002 and flowed off-site. Wetland 05-W016 was formed as a result of a seep then formed stream 05-ST006 and flowed off-site. Wetland 14-W011 also had a direct surface water connection with stream 14-ST004 but was not the main source of water for the stream. Other PEM wetlands contained isolated ponding of water likely collected from surface water runoff but resulted in no soil saturation below the surface due to compaction and clay soil layers.

Hydric soil conditions were observed, but a compacted layer prevented a full soil profile from being examined at most sample locations. Soils sampled within the emergent wetlands exhibited depleted matrix (F3), and redox dark surface (F6), with low chroma matrix colors and high chroma redox concentrations. The most common soil matrix colors were dark gray (10YR 4/1) with a redox concentration color of yellowish brown (10YR 5/8). The texture of soils in the emergent wetlands were generally characterized as clay loam

or silty clay loam and significantly disturbed due to the mine reclamation activities. Refusal was typically encountered 6 to 10 inches below surface in some areas due to unconsolidated rock layers.

The wetland-upland transitions for emergent wetlands were mostly abrupt, with clear changes in vegetation and topography. The adjacent uplands largely consisted of recently mowed grass and herbaceous vegetation typical of mine reclamation sites, such as broomsedge bluestem, red clover (*Trifolium prantense*), common plantain (*Plantago major*), Kentucky blue grass (*Poa pratensis*), bird's foot trefoil (*Lotus corniulatus*), common timothy (*Phleum pratense*), multiflora rose (*Rosa multiflora*), and field pansy (*Viola bicolor*). The eastern region of the Study Area also saw transitions from palustrine emergent wetland to an upland forest community dominated by tuliptree (*Liriodendron tulipifera*), London planetree (*Platanus ×hispanica*), and eastern hemlock (*Tsuga canadensis*).

Palustrine Scrub-Shrub Wetlands (PSS) – (Photos 87 through 90 in Appendix D).

Two wetlands identified within the Study Area, 12-W001 and 13-W001, contained persistent scrub-shrub vegetation. Both of these wetlands were found on a terrace that likely is a remnant feature from mining activity in the eastern portion of the Study Area along the gen-tie corridor. As with many of the emergent wetlands, soil compaction from reclamation activities created depressional areas for surface water to accumulate and for these wetlands to develop. Stream 12-ST004 drained wetland 12-W001 but terminated a short distance downstream as water flowed underground. Streams 13-ST001, 13-ST002, and 13-ST002A drained wetland 13-W001 and flowed out of the Study Area to Shinglepen Branch.

The scrub-shrub wetlands were characterized by the dominance of erect, rooted, woody wetland plants, including river birch (Betula nigra), multiflora rose, and autumn olive (*Elaeagnus umbellate*). Common herbaceous species included sensitive fern (*Onoclea sensibilis*), spotted jewelweed, colonial bentgrass (*Agrostis capillaris*), and various aster species (*Symphyotrichum* spp.).

Indicators of wetland hydrology in the scrub-shrub wetlands included a high water table (A2), soil saturation (A3), and oxidized rhizospheres on living roots (C3). Secondary indicators were also observed and included drainage patterns (B10), micrographic relief (D5), geomorphic position (D2), and results of the FAC-neutral test (D5).

Soils sampled within the shrub-scrub wetlands displayed hydric soil indicators such as depleted matrix (F3). The soils in the wetlands were characterized as dark gray (2.5YR 4/1) clay with redox concentrations of yellowish brown (10YR 5/4) at a depth of 6 to 18 inches, and gray silty clay loam (10YR 5/1) with redox concentrations of brownish yellow (10YR 6/6) in the pore linings to a depth of at least 18 inches.

Palustrine Forested Wetlands (PFO) – (Photos 91 and 92 in Appendix C)

One wetland delineated within the Study Area, 13-W002, contained at least 30% areal coverage of trees as the dominant vegetation. Wetland 13-W002 was located in the eastern portion of the Study Area along the gen-tie corridor.

Dominant overstory species included river birch (*Betula nigra*) and red maple (*Acer rubrum*). Other dominant vegetation included saplings of tuliptree and sourwood (*Oxydendrum* sp.) and herbaceous wetland plants, including netted chain fern (*Woodwardia areolata*) and spotted jewelweed.

Indicators of wetland hydrology in the forested wetland included standing surface water (A1), a high water table (A2), soil saturation (A3), water-stained leaves (B9), hydrogen sulfide odor (C1), and oxidized rhizospheres on living roots (C3). Secondary indicators observed included drainage patterns (B10), microtopographic relief (D4), and results of the FAC-neutral test (D5).

Soils sampled within the forested wetland were generally characterized as silty clay loam and clay. Soil matrix colors observed were gray (10YR 5/1) with a redox concentration of yellowish brown (10YR 5/8) to a depth of 14 inches, and gray (10YR 5/1) with a redox concentration of reddish yellow (7.5R 6/6) to a depth of at least 18 inches. Hydric soil indicators observed were a depleted matrix (F3).

The wetland-upland transitions for the forested wetlands had clear changes in vegetation and topography. The adjacent uplands consisted primarily of upland tree species and understory vegetation such as red maple, American basswood, multiflora rose, and clubmoss (*Lycopodium* sp.).

4.2.2 Streams

Delineated streams in the facility footprint portion of the Study Area were also heavily impacted by previous mining and mine reclamation activities. Streams in the eastern portion of the Study Area along the gen-tie corridor were part of well-defined river valleys typical of the area geography. Table 6 provides the delineated stream IDs, locations, type, size, and anticipated jurisdiction.

<u>Intermittent Streams (R4) – (Photos 1, 2, 7, 8, 13 through 18, 29 through 36, 41 through 44, 47, 48, 51 through 56, 59 through 64 in Appendix D)</u>

Twenty intermittent streams were delineated within the Study Area, four of which were in the facility footprint portion of the Study Area and 16 in the eastern gen-tie corridor portion of the Study Area. Stream 12-ST001 corresponds with NHD mapped stream Pigeon Roost Branch and stream 14-ST002.2 corresponds with NHD mapped stream Oliver Branch, both of which are tributaries to the North Fork Kentucky River. At the time of delineation, the intermittent streams had water depths ranging from 1 to 3 inches and OHWM bank widths of approximately 1 to 8 feet. Intermittent streams within the Study Area had gradients that ranged from moderate to steep, and were characterized by in-channel structures, head cuts, and well defined banks. The substrate in these streams generally consisted of boulders, cobble, gravel, sand, silt, and clay. Two of these streams, 14-ST002.2 and 14-ST003, were partially or wholly constructed to provide stormwater conveyance for mine reclamation activities, which resulted in weak sinuosity and boulder-dominated riprap substrate. Streams were classified as intermittent due to weak sinuosity and lack of biological indicators.

Ephemeral Streams (R6) – (Photos 3 through 6, 9 through 12, 23, 24, 37 through 40, 45, 46 in Appendix D)

Ten ephemeral streams were delineated within the Study Area, seven of which were in the facility footprint portion of the Study Area and three in the eastern gen-tie corridor portion of the Study Area. The ephemeral streams had bank widths ranging from 1 to 6 feet and gradients that ranged from moderate to steep. Four

of the ephemeral streams, 05-ST003, 05-ST004, 14-ST001, and 14-ST002.1, were characterized by gravel from mine fill and boulder-dominated substrate due to riprap stabilizing the edge of the reclaimed coal mine area. Stream 12-ST002.1 also corresponded with NHD mapped stream Oliver Branch, a tributary to the North Fork Kentucky River. Other ephemeral streams had a substrate that generally consisted of cobbles, gravel, and sand. All ephemeral streams were dry during the delineations. Streams were classified as ephemeral due to poorly developed channels, lack of varied sediment, weak sinuosity, and lack of biological indicators, as well as the presence of rooted upland plants and leaf litter within the channel.

Perennial Streams (R3) – (Photos 19 through 22, 25 through 28, 49, 50, 57, 58 in Appendix D)

Eight perennial streams were delineated within the Study Area, all of which were in the eastern gen-tie corridor portion of the Study Area. Stream 12-ST002 corresponded with NHD named stream First Creek, stream 13-ST014 corresponded with NHD mapped stream Shinglepen Branch, and stream 66-ST002 corresponded with NHD mapped stream Lower Second Creek, all of which are tributaries to the North Fork Kentucky River south of the Study Area. At the time of delineations, these streams had water depths ranging from 4 to 6 inches and OHWM bank widths of approximately 20 feet. Perennial streams within the Study Area had gentle gradients and were characterized by undercut banks, overhanging vegetation, woody debris, breaks in slope, and pools within the channel. The substrate in these streams generally consisted of boulders, cobble, gravel, sand, silt, and clay. Streams were classified as perennial due to well-developed channels, high baseflow, and sinuosity. Observed biological indicators include aquatic macroinvertebrates, fish, and amphibians.

4.2.3 Uplands

Along with uplands along the edges of delineated wetlands, EDR confirmed areas of upland within the Study Area at locations of potential wetlands identified through desktop review or observations while on site. Data were recorded at three upland points on standard USACE wetland determination forms (Figure 8). The upland areas were similar to uplands observed near delineated wetlands. Sample point 05-UPL001 was representative of upland open field areas within the reclaimed coal mine, with vegetation including common timothy, woolgrass, broomsedge bluestem, and other species of sedges. While some wetland indicator vegetation was observed, no other indicators were observed at this location. Upland points 66-UPL001 and 66-UPL002 were representative of the upland forested areas along the gen-tie line with vegetation such as tuliptree, red pine, red maple, Chinese silvergrass (*Miscanthus sinensis*), white snakeroot (*Ageratina altissima*), and Virginia creeper (Pathenocissus quinquefolia). No indicators of wetland hydrology were observed in the uplands, and soil texture was characterized as clay loam or silty clay. Photos 128 through 130 in Appendix D are representative of upland points.

5.0 CONCLUSIONS

Within the Study Area, EDR identified 42 wetlands totaling 3.03 acres, including 39 PEM wetlands encompassing 2.53 acres, two PSS wetlands totaling 0.43 acre, and one PFO wetland encompassing 0.01 acre. EDR also identified 20 intermittent streams totaling 4,229 linear feet, 10 ephemeral streams totaling 3,765 linear feet, and eight perennial streams totaling 1,080 linear feet, for a total 38 streams with 9,074 linear feet (1.72 miles) within the Study Area.

Eight of the delineated wetlands (Table 5) and 26 of the delineated streams (Table 6) are anticipated to be considered jurisdictional by the USACE under Section 404 of the Clean Water Act. All 26 anticipated jurisdictional delineated streams are intermittent or perennial tributaries to the North Fork Kentucky River. Five of these streams also correspond with NHD mapped streams, and five with NWI mapped riverines. Six of the delineated streams, 05-ST003, 05-ST004, 14-ST001, 14-ST002.1, 14-ST002.2, and 14-ST003, are constructed features associated with mine reclamation efforts, designed for the conveyance and treatment of stormwater or mine runoff. Although constructed, streams 14-ST002.2 and 14-ST003 are anticipated to be jurisdictional due to relative permeance of continuous water flow and connection to Oliver Branch, a tributary to the North Fork Kentucky River.

Eight delineated wetlands abut jurisdictional streams, and therefore are likely to be considered jurisdictional. The other 34 delineated wetlands are presumed to be non-jurisdictional because they are hydrologically isolated from any WOTUS. These isolated wetlands are a direct result of ponding in heavily disturbed, compacted mine reclamation soils.

Kentucky determines jurisdiction based on federal determinations of WOTUS; therefore, no DOW or other state agency jurisdictional determination is applicable. However, final determination of jurisdictional status of all waters delineated within the Study Area must be made by the USACE.

It should be noted that EDR has made a presumption of CWA jurisdiction for delineated wetlands and streams onsite based on the current understanding of the Sackett v. USEPA Supreme Court ruling for WOTUS. Final federal jurisdictional status of all waters delineated within the Study Area will be subject to determination by the USACE based on the Supreme Court decision. However, until the EPA and USACE have revised the WOTUS definition, the jurisdictional status of these resources may not be known and many USACE districts have placed a hold on Approved Jurisdictional Determinations (AJD). As such, opinions regarding potential jurisdiction presented in this report may need to be revisited upon the release of future USEPA and/or USACE guidance.

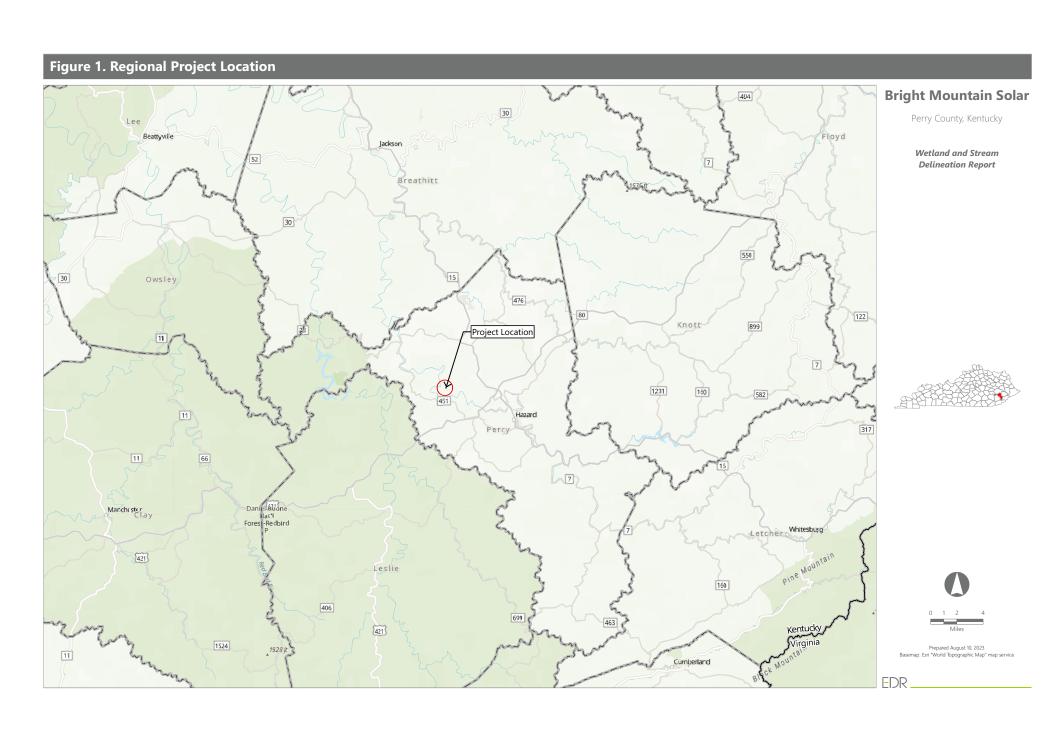
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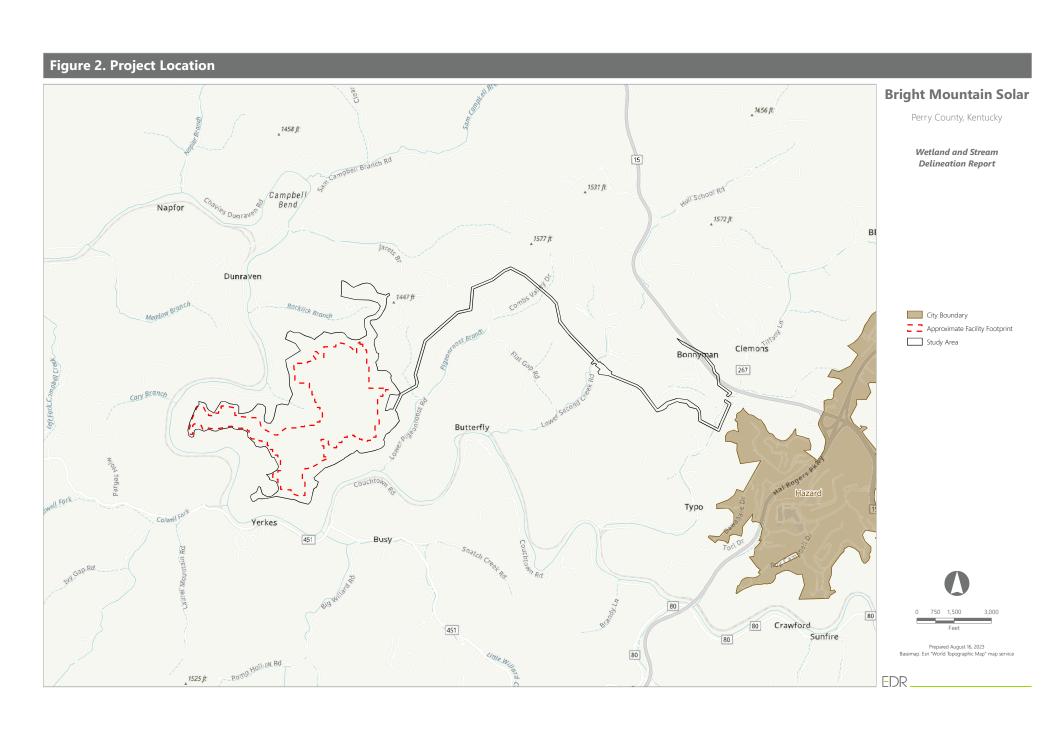


Figure 3. Study Area

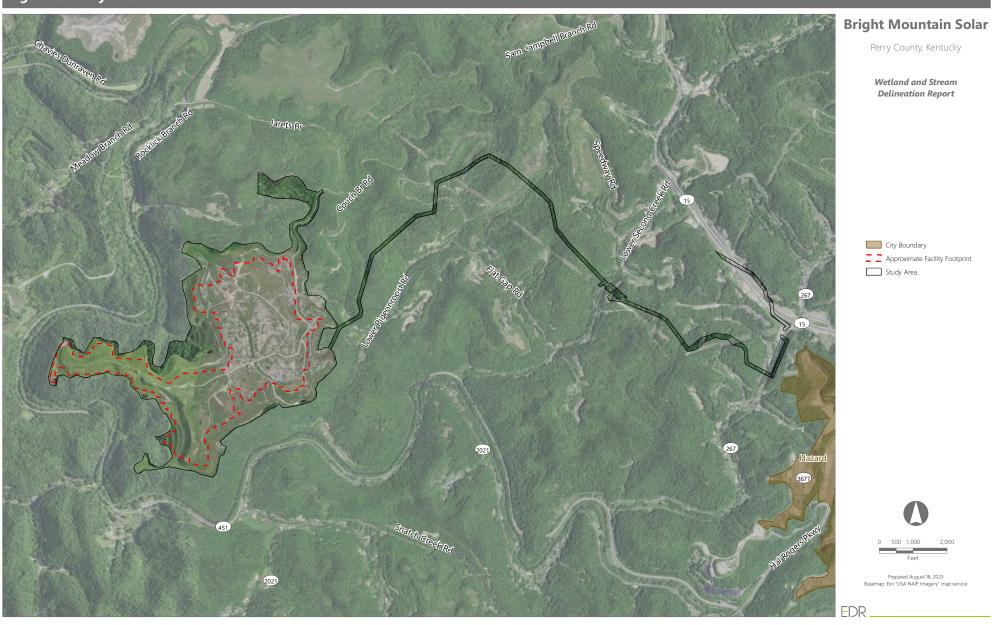
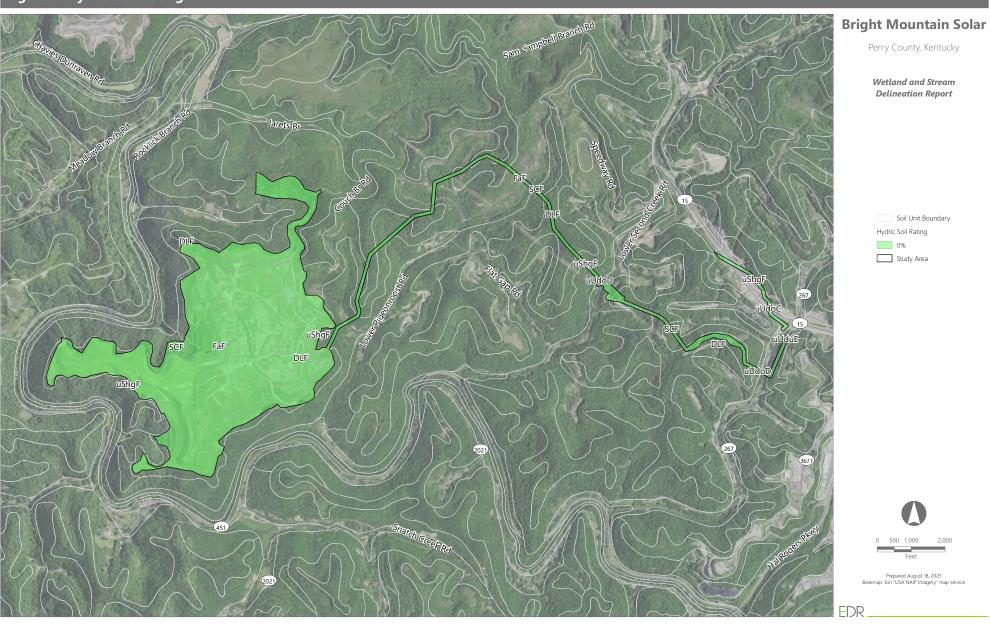


Figure 4. Hydric Soil Rating



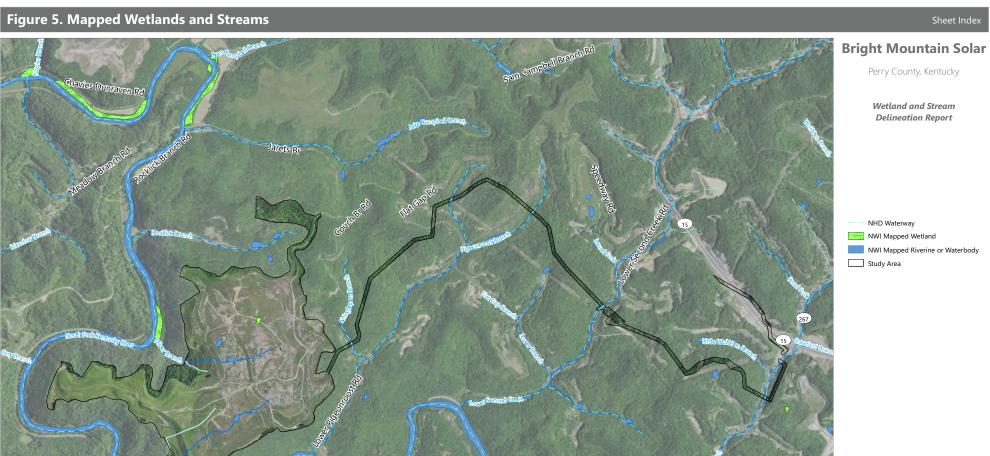




Figure 6. Flood Hazard Zone

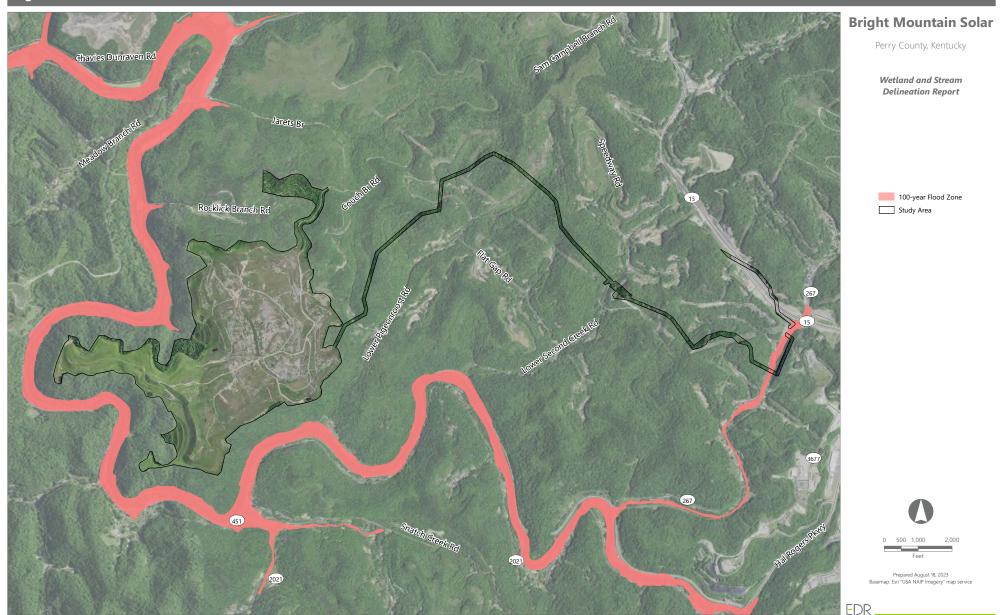
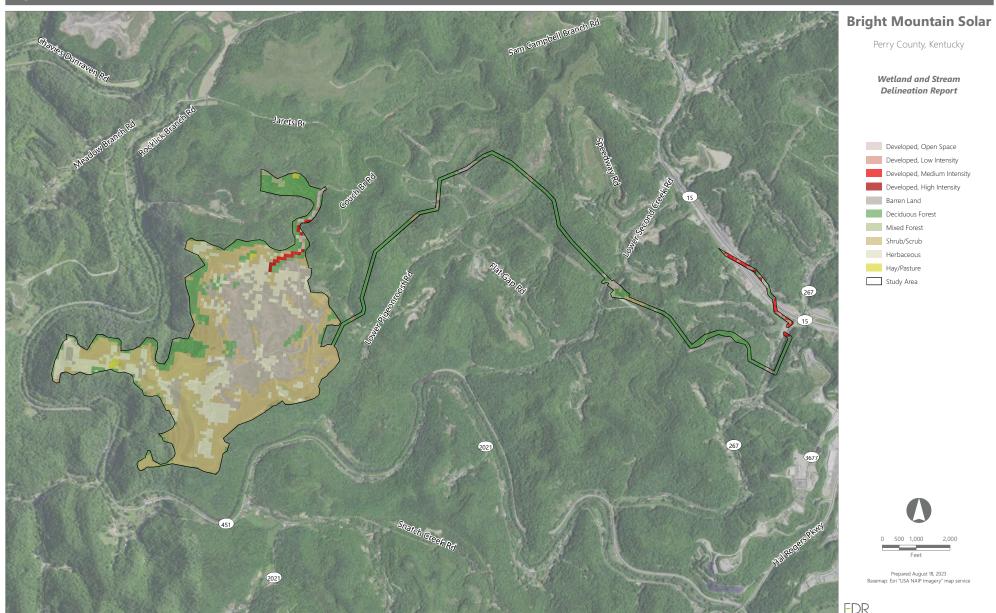
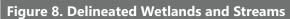
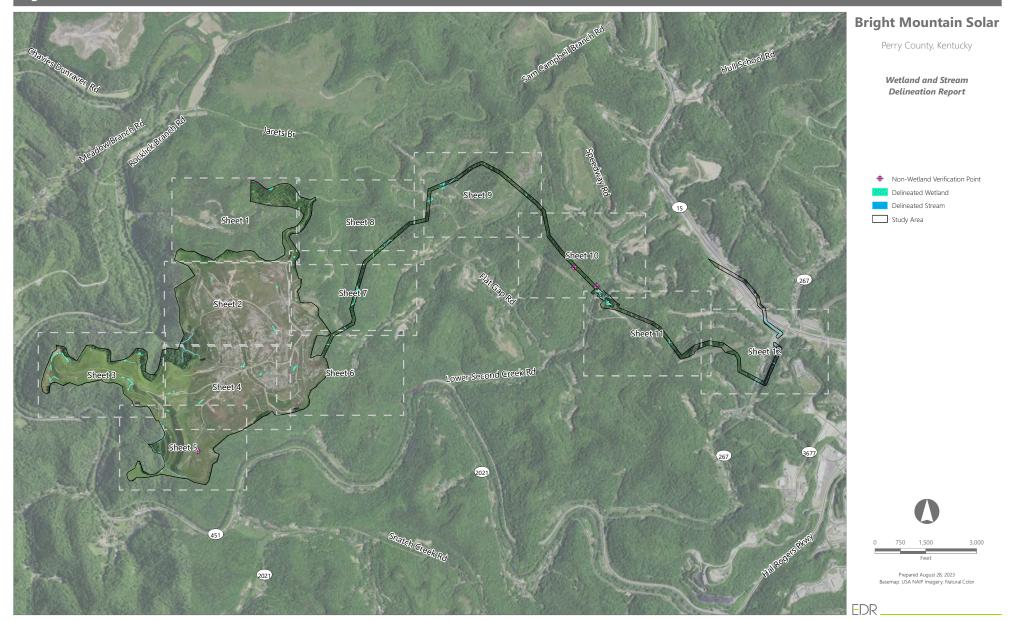


Figure 7. Land Cover





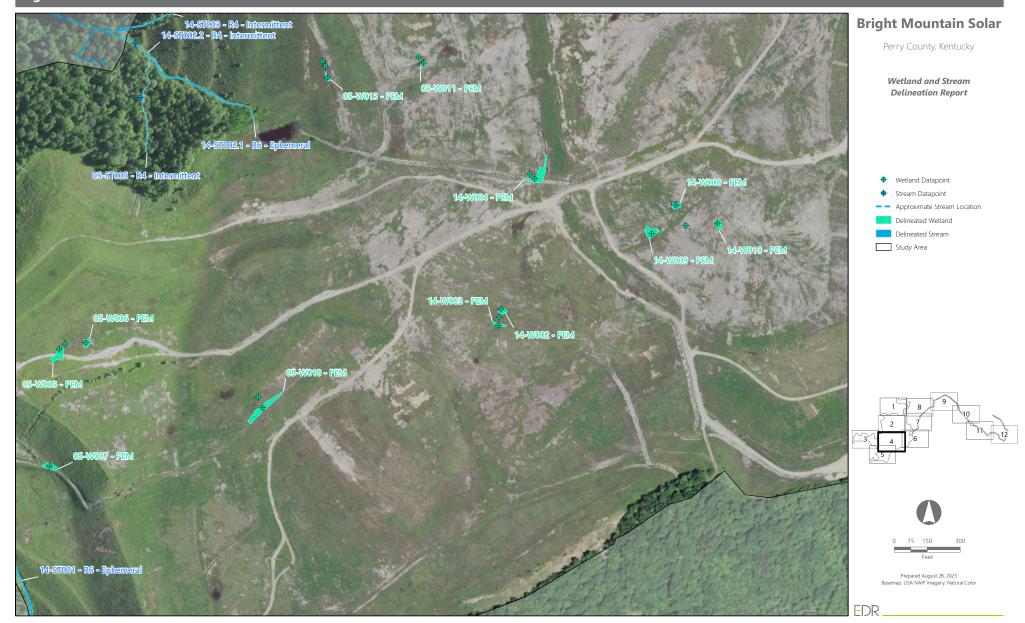
Sheet Index

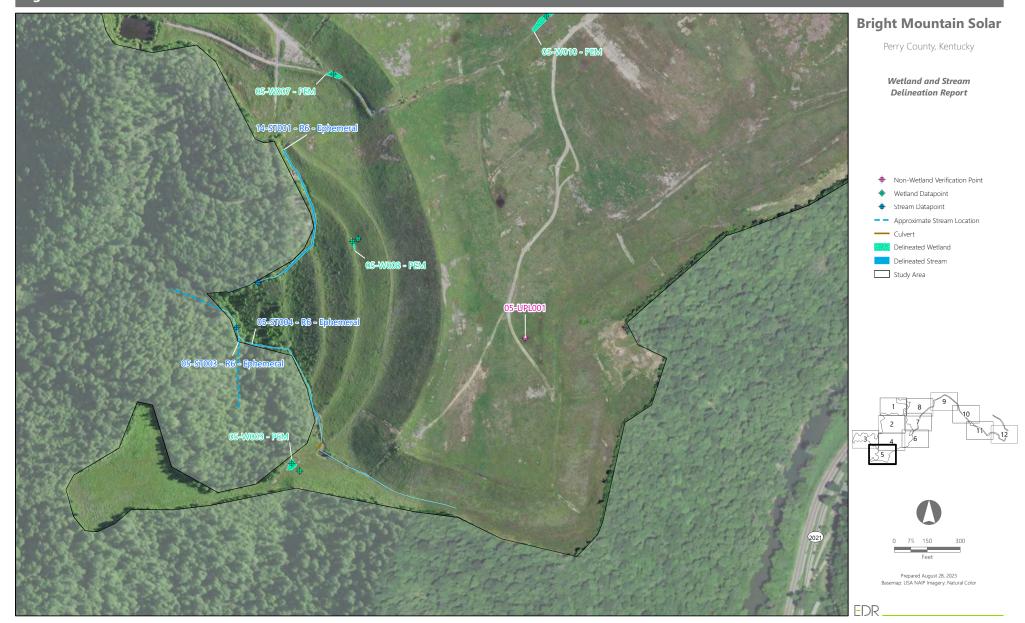




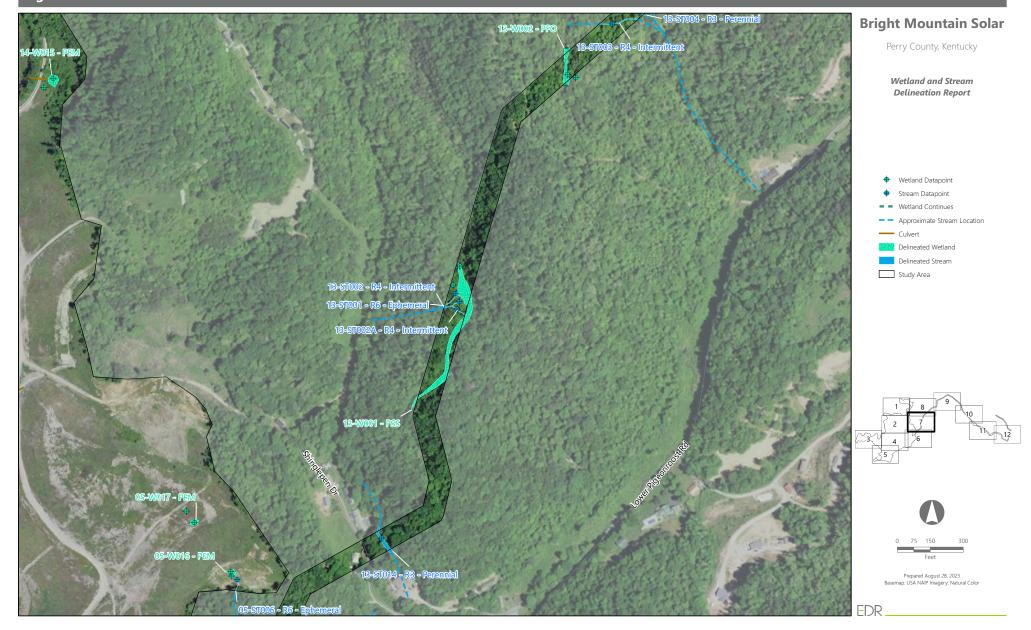


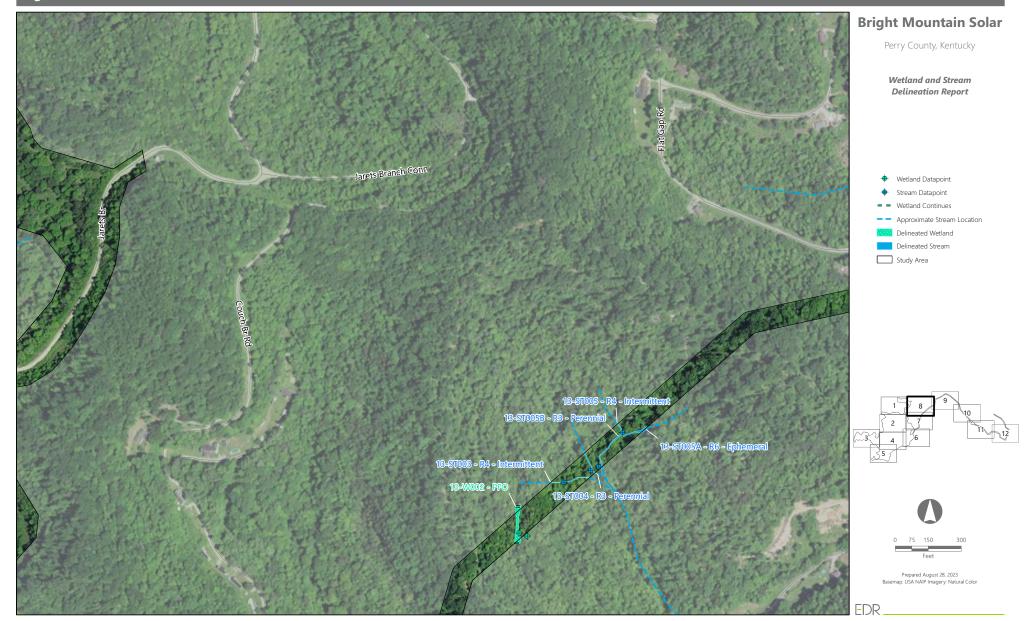


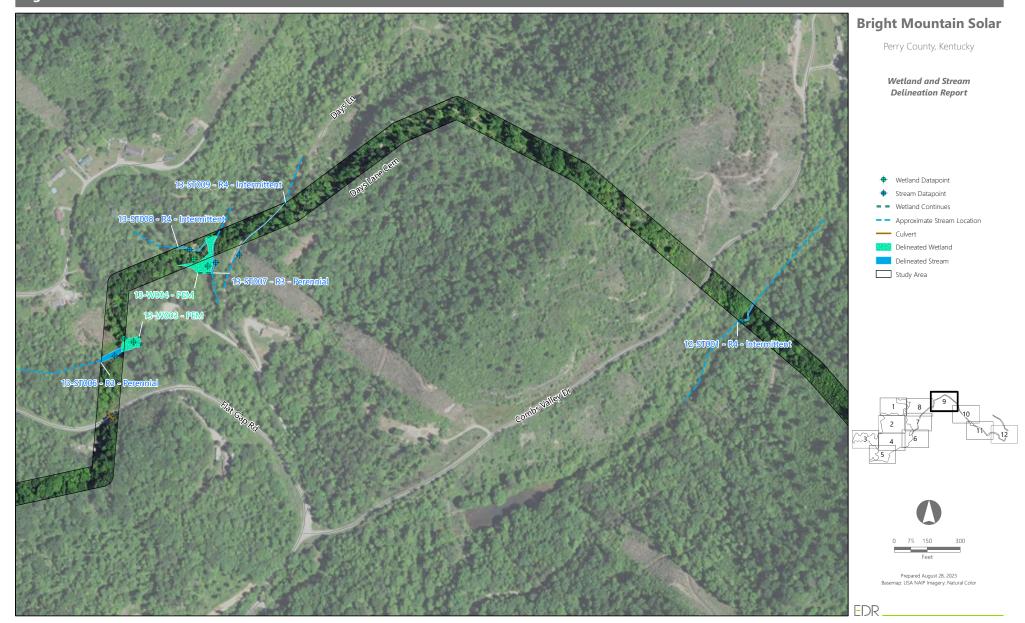






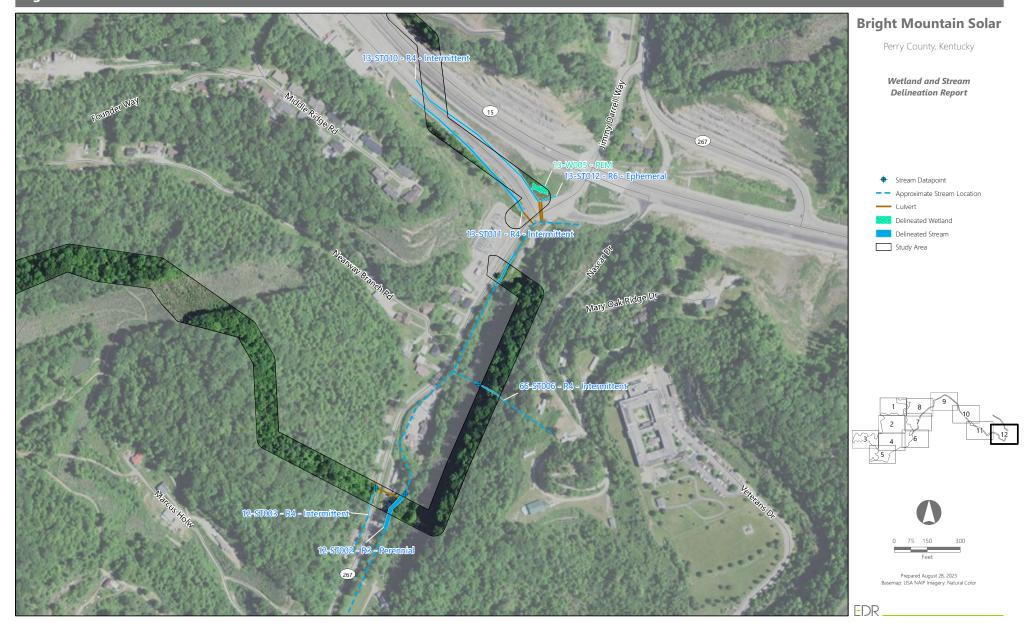




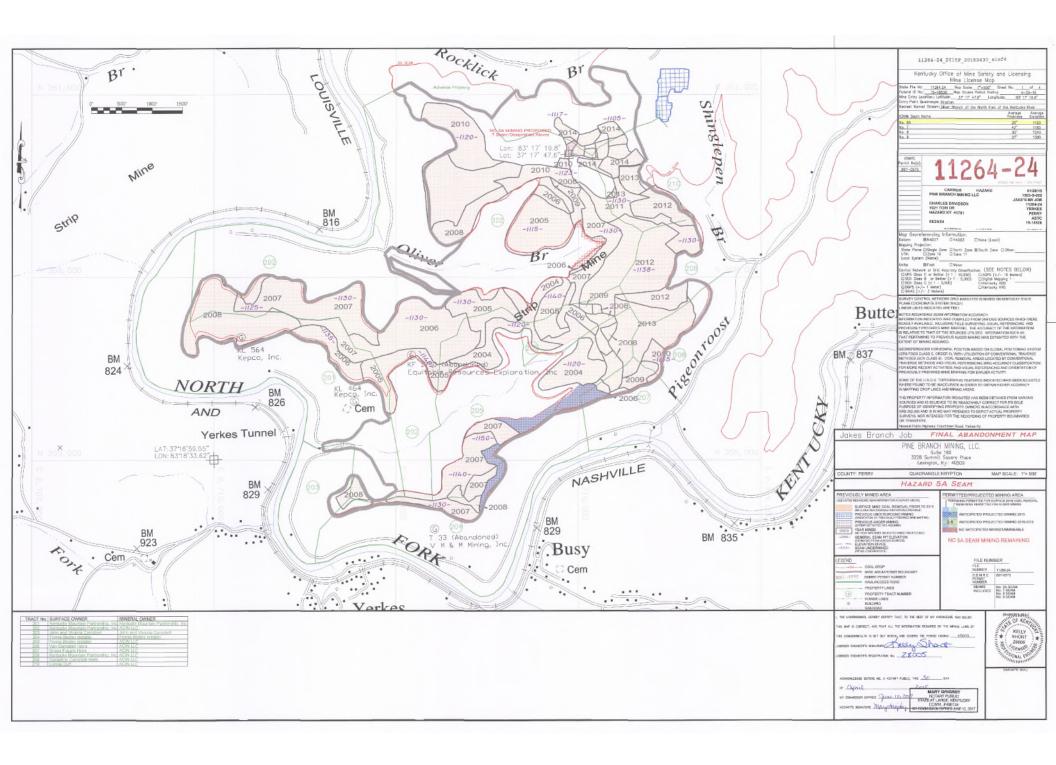












Appendix C. Routine Wetland Determination Data Sheets and Stream **Inventory Forms**

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	d, Perry County Sampling Date: 04/12/2022					
Applicant/Owner:	Avangrid Renewables	, LLC	Stat	e: Kentucky	Sampling Point:	05-W001-W1			
Investigator(s):	CS, RMS, JK	Section, Township	, Range:	Cit	y of Hazard				
Landform (hillslope, terrace, etc	c): Terrace		ave, convex, none):	concav	e Slope	e (%): 1-3			
Subregion (LRR or MLRA):	LRR N Lat:		· -	-83.3099418					
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 p			NWI classification					
	ons on the site typical for this time of year			xplain in Remark	s)				
		ntly disturbed?	Are "Normal Circu	•	,	X No			
	, or Hydrologynaturally	-	(If needed, explain	•		<u> </u>			
			,	-	•				
	S - Attach site map showing sa		salions, transect	s, important	leatures, etc.				
Hydrophytic Vegetation Prese									
Hydric Soil Present?	Yes X No	Is the	Sampled Area						
Wetland Hydrology Present?	Yes X No	within	a Wetland?	Yes X	No	_			
Remarks:		•							
HYDROLOGY									
Wetland Hydrology Indicate	ore:								
, ,,	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)			
X Surface Water (A1)		ic Plants (B14)			Cracks (B6)	two required)			
High Water Table (A2)		Sulfide Odor (C1)			getated Concave	Curfoco (DO)			
_ ` ` '		, ,	Poets (C2)		=	Surface (Bb)			
Saturation (A3) Water Marks (B1)		hizospheres on Living	Roots (C3)		atterns (B10)				
Sediment Deposits (B2)		f Reduced Iron (C4) Reduction in Tilled S	Soile (CG)	Moss Trim L	, ,				
			solis (Co)		Water Table (C2)				
Drift Deposits (B3)		Surface (C7) Crayfish Burrows (C8) lain in Remarks) Saturation Visible on Aerial Imagery (C9)							
Algal Mat or Crust (B4)	Other (Exp	ain in Remarks)				, ,			
Iron Deposits (B5)					Stressed Plants (D	-1)			
Inundation Visible on Ae					Position (D2)				
Water-Stained Leaves (В9)			Shallow Aqu	, ,				
Aquatic Fauna (B13)					aphic Relief (D4)				
				X FAC-Neutra	Liest (D5)				
Field Observations:									
Surface Water Present?	Yes X No Depth (inc	ches): 1							
Water Table Present?	Yes X No Depth (inc		_						
Saturation Present?	Yes X No Depth (inc		Wetland Hydro	logy Present?	Yes X	No			
(includes capillary fringe)			_		.00				
(melade eapmary imige)									
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos	, previous inspections	s), if available:						
Remarks:									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W001-W1 **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 100 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 10 x 5 = Column Totals: 110 (A) Prevalence Index = B/A = 2.27 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Juncus effusus / Common bog rush, Soft or lamp rush FACW 2. Scirpus cyperinus / Woolgrass 40 Yes FACW ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 10 NI be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 110 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 55 20% of total cover: 22 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W001-W1</u>

	ption: (Describe to th	e depth needed			or confirm	the absen	ce of indicator	s.)		
Depth	Matrix			Features	- -		- .			
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-6	10YR 4/2	98	7.5YR 6/8	2	С	M	Clay Loam	Refusal a	t 6inches	
						·				
										
¹Type: C=Con	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ked Sand Gra	ins.		²Loca	tion: PL=P	ore Lining, M=Matrix.	
Hydric Soil In	dicators:						Indicators	for Probl	ematic Hydric Soils³:	
Histosol (Dark Surfa	ce (S7)					A10) (MLRA 147)	
	pedon (A2)			Below Surface	. (SS) (MI	DA 1/17 1/			Redox (A16)	
							(
Black His	• •			Surface (S9)		17, 146)	Б.	(MLRA 1	•	
	Sulfide (A4)			yed Matrix (F	∠)		Pi		oodplain Soils (F19)	
_	Layers (A5)		X Depleted M					(MLRA 1	•	
_	k (A10) (LRR N)			k Surface (F6				-	Dark Surface (TF12)	
	Below Dark Surface (A	.11)		ark Surface (0:	ther (Expla	in in Remarks)	
Thick Da	k Surface (A12)		Redox Dep	ressions (F8))					
Sandy Mi	ucky Mineral (S1)		Iron-Manga	anese Masses	s (F12)					
(LRR N,	VILRA 147,148)		(LRR N, M	LRA 136)						
Sandy GI	eyed Matrix (S4)		Umbric Sur	face (F13) (I	MLRA 136	, 122)	³ Indica	tors of hyd	rophytic vegetation and	
Sandy Re	edox (S5)		Piedmont F	Floodplain So	ils (F19) (N	ILRA 148)	We	etland hydr	ology must be present.	
	Matrix (S6)			t Material (F2					bed or problematic.	
				`		<u> </u>				
Restrictive La	yer (if observed):									
Type:			_							
Depth (inc	hes):		_				Hydric Soil P	resent?	Yes X No	
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	erry County Sampling Date: 04/12/2022					
Applicant/Owner:	Avangrid Renewables	LLC	Stat	e: Kentucky	Sampling Point:	05-W001-W1			
Investigator(s):	CS, RMS, JK	Section, Township	o, Range:	Cit	y of Hazard				
Landform (hillslope, terrace, etc	c): Terrace		ave, convex, none):	concav	e Slope	e (%): 1-3			
Subregion (LRR or MLRA):	LRR N Lat:		· -	-83.3099418					
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 p			NWI classification					
	ons on the site typical for this time of year			xplain in Remark	s)				
		ntly disturbed?	Are "Normal Circu	•	,	X No			
	, or Hydrologynaturally	•	(If needed, explain	•		<u> </u>			
	SS - Attach site map showing sa		•	-	•				
	-		sations, transect	s, important	leatures, etc.				
Hydrophytic Vegetation Pres									
Hydric Soil Present?	Yes X No	Is the	Sampled Area						
Wetland Hydrology Present?	YesX No	within	a Wetland?	Yes X	No	_			
Remarks:									
HYDROLOGY									
Wetland Hydrology Indicate	ors:								
, ,,	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)			
X Surface Water (A1)		ic Plants (B14)			Cracks (B6)	two required)			
High Water Table (A2)		Sulfide Odor (C1)			getated Concave	Surface (B8)			
Saturation (A3)		hizospheres on Livin	a Poote (C3)		atterns (B10)	ourlace (Do)			
Water Marks (B1)		f Reduced Iron (C4)) 100ts (C3)	Moss Trim L	, ,				
Sediment Deposits (B2)		Reduction in Tilled	Soile (C6)		Water Table (C2)				
		Surface (C7)	solis (Co)		, ,				
Drift Deposits (B3)									
Algal Mat or Crust (B4)	Other (Exp	ain in Remarks)				, ,			
Iron Deposits (B5)	wiel Incomen (DZ)				Stressed Plants (D	-1)			
Inundation Visible on Ac					Position (D2)				
Water-Stained Leaves (вэ)			Shallow Aqu	, ,				
Aquatic Fauna (B13)					aphic Relief (D4)				
				X FAC-Neutra	i lest (D5)				
Field Observations:									
Surface Water Present?	Yes X No Depth (inc	ches): 1							
Water Table Present?	Yes X No Depth (inc		_						
Saturation Present?	Yes X No Depth (inc		Wetland Hydro	logy Present?	Yes X	No			
(includes capillary fringe)			_						
(g-,									
Describe Recorded Data (str	eam gauge, monitoring well, aerial photos	, previous inspection	s), if available:						
Remarks:									
l temano									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W001-W1 **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 100 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 10 x 5 = Column Totals: 110 (A) Prevalence Index = B/A = 2.27 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Juncus effusus / Common bog rush, Soft or lamp rush FACW 2. Scirpus cyperinus / Woolgrass 40 Yes FACW ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 10 NI be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 110 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 55 20% of total cover: 22 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W001-W1</u>

	ption: (Describe to th	e depth needed			or confirm	the absen	ce of indicator	s.)		
Depth	Matrix			Features	- -		- .			
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-6	10YR 4/2	98	7.5YR 6/8	2	С	M	Clay Loam	Refusal a	t 6inches	
						·				
										
¹Type: C=Con	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ked Sand Gra	ins.		²Loca	tion: PL=P	ore Lining, M=Matrix.	
Hydric Soil In	dicators:						Indicators	for Probl	ematic Hydric Soils³:	
Histosol (Dark Surfa	ce (S7)					A10) (MLRA 147)	
	pedon (A2)			Below Surface	. (SS) (MI	DA 1/17 1/			Redox (A16)	
							(
Black His	• •			Surface (S9)		17, 146)	Б.	(MLRA 1	•	
	Sulfide (A4)			yed Matrix (F	∠)		Pi		oodplain Soils (F19)	
_	Layers (A5)		X Depleted M					(MLRA 1	•	
_	k (A10) (LRR N)			k Surface (F6				-	Dark Surface (TF12)	
	Below Dark Surface (A	.11)		ark Surface (0:	ther (Expla	in in Remarks)	
Thick Da	k Surface (A12)		Redox Dep	ressions (F8))					
Sandy Mi	ucky Mineral (S1)		Iron-Manga	anese Masses	s (F12)					
(LRR N,	VILRA 147,148)		(LRR N, M	LRA 136)						
Sandy GI	eyed Matrix (S4)		Umbric Sur	face (F13) (I	MLRA 136	, 122)	³ Indica	tors of hyd	rophytic vegetation and	
Sandy Re	edox (S5)		Piedmont F	Floodplain So	ils (F19) (N	ILRA 148)	We	etland hydr	ology must be present.	
	Matrix (S6)			t Material (F2					bed or problematic.	
				`		<u> </u>				
Restrictive La	yer (if observed):									
Type:			_							
Depth (inc	hes):		_				Hydric Soil P	resent?	Yes X No	
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry	County	Sampling Date:	04/12/2022				
Applicant/Owner:	Avangrid Renewables	s, LLC	Sta	ate: Kentucky	Sampling Point:	05-W002-1U				
Investigator(s):	CM, RMS, JK	Section, Towns	hip, Range:	Cit	y of Hazard					
Landform (hillslope, terrace, etc	c): Terrace	Local relief (cor	ncave, convex, none):	concav	e Slope	e (%): 2-8				
Subregion (LRR or MLRA):	LRR N Lat:	37.28940	85 Long:	-83.310158	B Datu	m: WGS 84				
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70	percent slopes, ben	ched, stony	NWI classification	on:					
•	ons on the site typical for this time of yea			- explain in Remark	s.)					
		antly disturbed?		umstances" prese	,	X No				
	, or Hydrology naturall	-		in any answers in						
	S - Attach site map showing s		,	-	•					
	-	<	Totaliono, iranoco	to, important	iouturos, etc.					
Hydrophytic Vegetation Prese			a Campled Area							
Hydric Soil Present?			e Sampled Area	V	N- V					
Wetland Hydrology Present?	Yes No	<u> </u>	in a Wetland?	Yes	NoX_					
Remarks:										
Recently mowe	d, land recent capped mine disturbed soi	I								
HYDROLOGY										
Wetland Hydrology Indicate	ore:									
1	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)				
Surface Water (A1)	• • • • • • • • • • • • • • • • • • • •	tic Plants (B14)	_		Cracks (B6)	two roquirou)				
High Water Table (A2)		Sulfide Odor (C1)			getated Concave	Surface (B8)				
Saturation (A3)		Rhizospheres on Liv	ring Roots (C3)		atterns (B10)	Curiaco (Bo)				
Water Marks (B1)		of Reduced Iron (C4	- , ,		, ,					
Sediment Deposits (B2)			duced Iron (C4) Moss Trim Lines (B16) duction in Tilled Soils (C6) Dry-Season Water Table (C2)							
Drift Deposits (B3)		Surface (C7)								
Algal Mat or Crust (B4)		olain in Remarks)								
Iron Deposits (B5)	Other (EX	Dialit ili Nemarks)	in in Remarks) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)							
	wiel Imagen (P7)				,	1)				
Inundation Visible on Ae	• , ,				Position (D2)					
Water-Stained Leaves (I	59)			Shallow Aqu	, ,					
Aquatic Fauna (B13)					aphic Relief (D4)					
				FAC-Neutra	Tilest (D5)					
Field Observations:										
Surface Water Present?	Yes No X Depth (ir	nches):								
Water Table Present?	Yes No X Depth (ir	nches):								
Saturation Present?	Yes No X Depth (in	nches):	Wetland Hydi	rology Present?	Yes	No X				
(includes capillary fringe)						- —				
D " D 1 1 D 1 / /										
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photo	s, previous inspection	ons), if available:							
Remarks:										
i										

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W002-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 3 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 70 FACU species x 4 = UPL species x 5 = Column Totals: 95 (A) Prevalence Index = B/A = 4.26 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5) Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem **FACU** 2. Poa pratensis / Kentucky blue grass 30 Yes FACU ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 25 NI be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 19 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W002-1U

	ption: (Describe to th	e depth neede			or confirm	the absen	ce of indicator	rs.)			
Depth (inches)	Matrix Color (moist)	<u></u> %		Features	Tunc1	1 002	Toytur-		Dom: = =l·-		
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc²	Texture		Remarks		
0-18	10YR 4/2	95	10YR 4/6	5	<u> </u>	<u>M</u>	Silt Loam	Heavily dis	sturbed soils f	rom mining	
-											
¹Type: C=Con	centration, D=Depletion	, RM=Reduced	l Matrix, MS=Mask	ked Sand Gra	ains.		²Loca	ation: PL=Po	ore Lining, M=	Matrix.	
Hydric Soil In	dicators:						Indicator	s for Proble	matic Hydric	Soils3:	
Histosol (A1)		Dark Surfa	ce (S7)					.10) (MLRA 1		
Histic Epi	pedon (A2)		Polyvalue E	Below Surfac	e (S8) (ML	.RA 147, 14	48) <u> </u>	oast Prairie	Redox (A16)		
Black His	tic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 14	7, 148)		
Hydroger	Sulfide (A4)		Loamy Gle	yed Matrix (F	2)		P	iedmont Flo	odplain Soils ((F19)	
Stratified	Layers (A5)		Depleted M	latrix (F3)				(MLRA 13	6, 147)		
2 cm Mud	k (A10) (LRR N)		Redox Darl	k Surface (F6	3)		v	ery Shallow	Dark Surface	(TF12)	
Depleted	Below Dark Surface (A	.11)	Depleted D	ark Surface	(F7)		0	ther (Explain	n in Remarks)		
Thick Dar	k Surface (A12)		Redox Dep	ressions (F8)						
Sandy Mu	ucky Mineral (S1)		Iron-Manga	anese Masse	s (F12)						
(LRR N, I	MLRA 147,148)		(LRR N, M	LRA 136)							
Sandy GI	eyed Matrix (S4)		Umbric Sur	face (F13) (MLRA 136	, 122)	³Indica	ators of hydro	ophytic vegeta	ition and	
Sandy Re				loodplain So			w	etland hydro	ology must be	present.	
Stripped	Matrix (S6)		Red Parent	t Material (F2	21) (MLRA	127, 147)	u	nless disturb	ed or problen	natic.	
Restrictive La	yer (if observed):										
Type:			_								
Depth (inc	hes):		_				Hydric Soil F	Present?	Yes	No	Χ
Damadia											
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ry County Sampling Date: 04/12/2022					
Applicant/Owner:	Avangrid Renewables,	LLC	Stat	e: Kentucky	Sampling Point:	05-W002-1W			
Investigator(s):	JK CS RMS	Section, Township,	Range:	Cit	y of Hazard				
Landform (hillslope, terrace, etc): Bowl shaped depression	Local relief (concav	e, convex, none):	concave	e Slop	e (%): 1-3			
Subregion (LRR or MLRA):		37.28925733	Long:	-83.309986		, ,			
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe			NWI classification					
	ons on the site typical for this time of year?			explain in Remark	s)				
Are Vegetation X , Soil	• • • • • • • • • • • • • • • • • • • •	tly disturbed?	Are "Normal Circu		,	X No			
	, or Hydrologynaturally	-	(If needed, explain	•		<u> </u>			
	S - Attach site map showing sar		,	-	•				
			mons, mansect	s, important	eatures, etc.				
Hydrophytic Vegetation Prese		_							
Hydric Soil Present?	Yes X No		ampled Area						
Wetland Hydrology Present?	YesX No	within a	Wetland?	Yes X	No	_			
Remarks:	coal mine. Disturbed								
Mowed capped	coal milite. Disturbed								
HYDROLOGY									
Wetland Hydrology Indicato				0		: .			
	of one required: check all that apply)	DI ((D(1))			ators (minimum of	two required)			
X Surface Water (A1)		c Plants (B14)			Cracks (B6)				
High Water Table (A2)	_ · ·	ulfide Odor (C1)			getated Concave	Surface (B8)			
Saturation (A3)		nizospheres on Living F	Roots (C3)	X Drainage Pa	, ,				
Water Marks (B1)		Reduced Iron (C4)	(C4) Moss Trim Lines (B16)						
Sediment Deposits (B2)		eduction in Tilled Soils (C6) Dry-Season Water Table (C2)							
Drift Deposits (B3)	Thin Muck S	Surface (C7)		Crayfish Bui	rows (C8)				
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)		Saturation V	isible on Aerial Im	nagery (C9)			
Iron Deposits (B5)				Stunted or S	Stressed Plants (D	01)			
Inundation Visible on Ae	rial Imagery (B7)			Geomorphic	Position (D2)				
Water-Stained Leaves (E	39)			Shallow Aqu	iitard (D3)				
Aquatic Fauna (B13)				Microtopogr	aphic Relief (D4)				
				X FAC-Neutra	Test (D5)				
Field Observations:									
	Van V. Na. Danth (in al	h\. 1							
Surface Water Present?	Yes X No Depth (incl	· —	-						
Water Table Present?	Yes NoX Depth (incl		.	. 5	., .,				
Saturation Present?	Yes NoX Depth (incl	nes):	Wetland Hydro	ology Present?	Yes X	No			
(includes capillary fringe)									
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections),	, if available:						
Remarks:									
İ									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W002-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 80 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 10 x 5 = Column Totals: 90 (A) Prevalence Index = B/A = 2.33 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 _ = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass FACW 2. Juncus effusus / Common bog rush, Soft or lamp rush 35 FACW Yes ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster NI be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 45 20% of total cover: 18 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W002-1W

Profile Desci Depth	ription: (Describe to t Matrix	ine aepth ne		i e indicator k Features	or confirm	tne abser	nce of indicator	S.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remark	S
0-5	10YR 4/2	95	7.5YR 4/6	5	C	M,PL	Clay Loam		. tomani	
5-18	10YR 4/1	60	7.5YR 5/8	40	C	M	Clay Loam	Gravelly	fill	
0 .0			1101111070				olay zoalii	<u> </u>		
								-		
								-		
¹ Type: C=Cor	ncentration, D=Depletion	on, RM=Redu	ced Matrix, MS=Mask	ked Sand Gr	rains.		²Loca	ation: PL=P	ore Lining, M	=Matrix.
Hydric Soil I	ndicators:						Indicators	s for Probl	ematic Hydri	ic Soils³:
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A10) (MLRA	147)
Histic Ep	pipedon (A2)		Polyvalue B	Below Surface	ce (S8) (M	LRA 147, 1	1 48) C	oast Prairie	Redox (A16))
Black Hi	stic (A3)		Thin Dark S	Surface (S9)	(MLRA 1	47, 148)		(MLRA 1		
	n Sulfide (A4)			yed Matrix (Pi	-	oodplain Soils	(F19)
	Layers (A5)		X Depleted M		,		_	(MLRA 1		,
2 cm Mu	ck (A10) (LRR N)		Redox Dar	k Surface (F	⁷ 6)		Ve	ery Shallow	Dark Surface	e (TF12)
Depleted	Below Dark Surface ((A11)	Depleted D	ark Surface	(F7)		<u> </u>	ther (Expla	in in Remarks	s)
Thick Da	rk Surface (A12)		Redox Dep	ressions (F	8)					
Sandy M	lucky Mineral (S1)		Iron-Manga	anese Masse	es (F12)					
(LRR N,	MLRA 147,148)		(LRR N, M	LRA 136)						
Sandy G	leyed Matrix (S4)			face (F13)	(MLRA 136	6, 122)	³Indica	tors of hyd	rophytic vege	tation and
	edox (S5)			Floodplain S	•	-			ology must be	
	Matrix (S6)			t Material (F					bed or proble	
							<u> </u>			
	ayer (if observed):									
Type:	1 \								., .,	
Depth (in	cnes):						Hydric Soil P	resent?	Yes X	No
Remarks:	Area disturbed from co	oal mining. Re	cently capped							

Project/Site:	Bright Mour	ntain Solar		City/Co	ountv:	Hazard, Perry	/ County	Sampling Date:	04/12/2022			
Applicant/Owner:			rid Renewables,				tate: Kentucky		05-W003/004-1U			
Investigator(s):	JK. C	S, RMS			n, Township, Ran			y of Hazard	-			
Landform (hillslope, terrace, etc		Terrac	e	_	elief (concave, co			•	oe (%): 0-5			
Subregion (LRR or MLRA):		RR N	Lat:	_	7.2893734	Long:	-83.3023138					
Soil Map Unit Name:		F	air point and Be				NWI classification					
Are climatic / hydrologic conditi	ons on the site	e typical for t	his time of year	? Yes	X No	(If no	— , explain in Remark	s.)				
Are Vegetation X , Soil				ntly disturb	ed? A	re "Normal Ci	rcumstances" prese	ent? Yes	X No			
Are Vegetation , Soil			naturally	problemat			lain any answers in					
SUMMARY OF FINDING						ns. transe	cts. important	features. etc	_			
Hydrophytic Vegetation Pres		Yes		<u> </u>	1		1 1 1 1					
Hydric Soil Present?	GIIL:		No No		Is the Samp	lod Aroa						
Wetland Hydrology Present?	,	YesX	No X	_	within a Wet		Yes	No X				
Welland Hydrology Fresent:		165	NOX		within a vve		163		_			
Remarks:												
HYDROLOGY												
Wetland Hydrology Indicat	ors:											
Primary Indicators (minimum		ed: check all	that apply)				Secondary Indica	ators (minimum o	of two required)			
Surface Water (A1)			True Aquati	c Plants (E	314)			Cracks (B6)	<u> </u>			
High Water Table (A2)		-	Hydrogen S					getated Concave	e Surface (B8)			
Saturation (A3)		-			es on Living Root	ts (C3)		atterns (B10)	,			
Water Marks (B1)		-	Presence o		•	,	Moss Trim L					
Sediment Deposits (B2))	-	Recent Iron	Reduction	n in Tilled Soils (Tilled Soils (C6) Dry-Season Water Table (C2)						
Drift Deposits (B3)		-	Thin Muck	Surface (C	(7)	,	Crayfish Bu	rrows (C8)	•			
Algal Mat or Crust (B4)		-	Other (Expl					/isible on Aerial I	magery (C9)			
Iron Deposits (B5)		-			,			Stressed Plants (I				
Inundation Visible on A	erial Imagery ((B7)						Position (D2)				
Water-Stained Leaves (B9)						Shallow Aqu					
Aquatic Fauna (B13)							Microtopogr	aphic Relief (D4))			
_							FAC-Neutra	l Test (D5)				
Field Observations:					T							
Surface Water Present?	Voc	No. 3	V Donth (inc	hoo):								
Water Table Present?	Yes		X Depth (income Depth (inco									
	Yes			· —		Wetlend Hy	dralami Dragamt?	Vaa	No. V			
Saturation Present? (includes capillary fringe)	Yes	No	X Depth (inc	nes).		welland nyc	drology Present?	Yes	NoX			
(includes capillary lifinge)												
Describe Recorded Data (str	eam gauge, n	nonitoring we	II, aerial photos	, previous i	inspections), if a	vailable:						
Damardan												
Remarks:												

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W003/004-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 3 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 30 FACU species x 4 = 120 UPL species 70 x 5 = 350 100 Column Totals: (A) Prevalence Index = B/A = 4.7**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Aster / Aster 2. Lamium purpureum / Purple dead nettle 30 Yes NI ¹Indicators of hydric soil and wetland hydrology must 3. Viola bicolor / Field pansy 30 FACU be present, unless disturbed or problematic. 4. _____ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W003/004-1U</u>

	ption: (Describe to th	e depth neede			or confirm	the abser	nce of indicators	s.)		
Depth (in aboa)	Matrix			Features	To or - 1	12	Taxatoro		Danssils	
(inches)	Color (moist)		Color (moist)	<u> %</u>	Type ¹	Loc ²	Texture		Remarks	
0-7	2.5Y 4/1	95	10YR 5/8	5	<u> </u>	M	Sity Clay Loam			
¹Type: C=Con	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ked Sand Gra	ains.		²Loca	tion: PL=P	ore Lining, M=Mat	trix.
Hydric Soil In	dicators:						Indicators	for Proble	ematic Hydric So	ils³:
Histosol (A1)		Dark Surface	ce (S7)			2 0	m Muck (A	A10) (MLRA 147)	
Histic Epi	pedon (A2)		Polyvalue E	Below Surface	e (S8) (ML	.RA 147, 1	148) Co	ast Prairie	Redox (A16)	
Black His				Surface (S9)			, <u>—</u>	(MLRA 14		
_	Sulfide (A4)			yed Matrix (F		, -,	Pie	•	oodplain Soils (F19	9)
_	Layers (A5)		X Depleted M		,		<u> </u>	(MLRA 13		,
_	ck (A10) (LRR N)			k Surface (F6	3)		\/e	-	Dark Surface (TF	:12)
_	Below Dark Surface (A	11)		ark Surface (-	in in Remarks)	12)
		.11)					_ 01	ilei (Expiai	iii iii iXeiiiaiks)	
	k Surface (A12)			ressions (F8)						
	ucky Mineral (S1)			anese Masses	S (F12)					
•	MLRA 147,148)		(LRR N, MI	•		400)	21 11 1			
	eyed Matrix (S4)			face (F13) (ophytic vegetation	
Sandy Re				loodplain So					ology must be pre	
Stripped	Matrix (S6)		Red Parent	t Material (F2	(1) (MLRA	127, 147)) un	less disturl	bed or problemation	С.
Restrictive I	ayer (if observed):									
Type:	iyer (ii observeu).									
	haa):		_				Lludria Cail D	+2	Voc. V	No
Depth (inc	nes).		_				Hydric Soil Pi	resent?	Yes X	No
Remarks:										
	Rock refusal 7 inches									

roject/Site: Bright Mountain Solar				County:	Hazard, Perry	rry County Sampling Date: 04/12/2022		
Applicant/Owner:			enewables, LLC	, <u> </u>	•	ate: Kentucky	Sampling Point:	05-W003-1W
Investigator(s):	CM, RMS,	JK	Sect	ion, Township, R	ange:	Ci	ty of Hazard	
Landform (hillslope, terrace,		haped depres		l relief (concave,		concav	re Slope	e (%): 2-5
Subregion (LRR or MLRA):	LRR I	N	Lat:	37.28926483	Long:	-83.302714		
Soil Map Unit Name:	Fairpoint and B	ethesda soils	s, 2 to 70 percent s		stony	NWI classificati	on:	
Are climatic / hydrologic cond				X No		_ , explain in Remarl	ks.)	
	oil X , or Hydro		significantly distu	ırbed?	Are "Normal Cir	cumstances" prese	ent? Yes	X No
Are Vegetation , Sc			naturally problen	natic?		ain any answers in		
SUMMARY OF FINDIN					ions. transec	cts. important	features, etc.	
Hydrophytic Vegetation Pro			No No			1 1		
Hydric Soil Present?	Ye		No	le the San	npled Area			
Wetland Hydrology Presen			No	within a V	•	Yes X	No	
Welland Trydrology Fresen		- X		within a v	retialiu:	163	NO	_
Remarks:								
Vegetation re	cently mowed, soil re	ecently reclair	med coal mine					
HYDROLOGY								
Wetland Hydrology Indic						0 1 1 "		
Primary Indicators (minimu	m of one required: cl		,	(544)			ators (minimum of	two required)
Surface Water (A1)			Frue Aquatic Plants				il Cracks (B6)	0 ((D0)
High Water Table (A2)		Hydrogen Sulfide C		. (00)		egetated Concave	Surface (B8)
Saturation (A3)			Oxidized Rhizosphe	•	oots (C3)		atterns (B10)	
Water Marks (B1)	10)		Presence of Reduc	` ,	(00)	Moss Trim	, ,	
Sediment Deposits (B	.2)		Recent Iron Reduct		s (C6)		Water Table (C2)	1
Drift Deposits (B3)	4)		Thin Muck Surface			Crayfish Bu		(00)
Algal Mat or Crust (B4	+)	— '	Other (Explain in R	emarks)			Visible on Aerial Im	
Iron Deposits (B5)							Stressed Plants (D)1)
Inundation Visible on							c Position (D2)	
Water-Stained Leaves	s (B9)					Shallow Aq	, ,	
Aquatic Fauna (B13)							raphic Relief (D4)	
						X FAC-Neutra	al Test (D5)	
Field Observations:								
Surface Water Present?	Yes	No X	Depth (inches):					
Water Table Present?	Yes	No X	Depth (inches):					
Saturation Present?		No X	Depth (inches):		Wetland Hvd	Irology Present?	Yes X	No
(includes capillary fringe)			_		,			- '
(
Describe Recorded Data (s	stream gauge, monito	oring well, ae	rial photos, previou	ıs inspections), if	available:			
Damada								
Remarks: Disturbed by	reclaimed Coal minin	ng area mow	ed					
Diotarboa by	roolaimoa ooai miinii	ig aroa, mow	ou					

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W003-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 95 x 2 = Sapling/Shrub Stratum (Plot size: 15 5 x 3 = FAC species 0 FACU species x 4 = UPL species 0 x 5 = 100 Column Totals: (A) Prevalence Index = B/A = 2.05 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass FACW 2. Dichanthelium clandestinum / Deer-tongue rosette grass No FAC ¹Indicators of hydric soil and wetland hydrology must 3. Juncus effusus / Common bog rush, Soft or lamp rush FACW be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W003-1W

Profile Descri	ption: (Describe to the	depth neede	d to document th	e indicator o	or confirm	the absence	ce of indicator	rs.)		
Depth	Matrix		Redox	Features						
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc²	Texture		Remarks	
0-8	5Y 4/1	98	10YR 5/8	2	С	M	Silt Loam	Reclaimed	l coal mine, refusal at 8 in	nches
				· ——						
				· ——						
				· ——						
										
¹Type: C=Cond	entration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ced Sand Gra	ins.		²Loca	ation: PL=Po	ore Lining, M=Matrix.	
Hydric Soil In	dicators:						Indicator	s for Proble	ematic Hydric Soils³:	
Histosol (A1)		Dark Surfac	ce (S7)			2	cm Muck (A	.10) (MLRA 147)	
Histic Epi	pedon (A2)		Polyvalue E	Below Surface	e (S8) (ML	RA 147, 14	1 8) C	oast Prairie	Redox (A16)	
Black His	ic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 14	7, 148)	
Hydrogen	Sulfide (A4)		Loamy Gley	yed Matrix (F	2)		P	iedmont Flo	odplain Soils (F19)	
Stratified	Layers (A5)		X Depleted M	latrix (F3)				(MLRA 13	6, 147)	
2 cm Muc	k (A10) (LRR N)		Redox Dark	k Surface (F6)		v	ery Shallow	Dark Surface (TF12)	
Depleted	Below Dark Surface (A	11)	Depleted D	ark Surface (F7)		0	ther (Explain	n in Remarks)	
Thick Dar	k Surface (A12)		Redox Dep	ressions (F8))					
Sandy Mu	cky Mineral (S1)		Iron-Manga	inese Masses	s (F12)					
(LRR N, I	/ILRA 147,148)		(LRR N, ML	LRA 136)						
Sandy Gle	eyed Matrix (S4)		Umbric Sur	face (F13) (I	MLRA 136	, 122)	³Indica	tors of hydro	ophytic vegetation and	
Sandy Re	dox (S5)		Piedmont F	loodplain Soi	ils (F19) (N	/ILRA 148)	w	etland hydro	ology must be present.	
Stripped N	//atrix (S6)		Red Parent	: Material (F2	1) (MLRA	127, 147)	u	nless disturb	ed or problematic.	
Restrictive I a	yer (if observed):									
Type:	yer (ii observeu).									
Depth (incl	nes):		_				Hydric Soil F	Present?	Yes X No	
Верит (ше			_				Tryuno con r	TCSCIII.	103 <u>X</u> 110	
Remarks:										
R	eclaimed coal mine									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	azard, Perry County		04/12/2022		
Applicant/Owner:	Avangrid Renewables	, LLC	State	: Kentucky	Sampling Point:	05-W004-1W		
Investigator(s):	CM, RMS, JK	Section, Township,	Range:	Cit	y of Hazard			
Landform (hillslope, terrace, etc	e): Bowl shaped depression		ve, convex, none):	concave	e Slope	e (%): 2-5		
Subregion (LRR or MLRA):		37.28914833	· —	-83.302148				
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 p			NWI classification		-		
	ons on the site typical for this time of year			plain in Remarks				
Are Vegetation X , Soil	**	ntly disturbed?	Are "Normal Circum		,	X No		
	, or Hydrology naturally	=	(If needed, explain					
	S - Attach site map showing sa		,	-	·			
			alions, transects	, important i	leatures, etc.			
Hydrophytic Vegetation Prese								
Hydric Soil Present?	Yes X No	Is the S	ampled Area					
Wetland Hydrology Present?	Yes <u>X</u> No	within a	a Wetland?	Yes X	No	_		
	red recently, soil reclaimed coal mine							
HYDROLOGY								
Wetland Hydrology Indicato	ors:							
Primary Indicators (minimum	of one required: check all that apply)		<u> </u>	econdary Indica	ators (minimum of	two required)		
X Surface Water (A1)	True Aquat	ic Plants (B14)		Surface Soil	Cracks (B6)			
High Water Table (A2)	Hydrogen S	Sulfide Odor (C1)	_	Sparsely Ve	getated Concave	Surface (B8)		
Saturation (A3)	Oxidized R	hizospheres on Living	Roots (C3)	Drainage Pa	atterns (B10)			
Water Marks (B1)	Presence c	of Reduced Iron (C4)	_	Moss Trim L	ines (B16)			
Sediment Deposits (B2)	Recent Iron	Reduction in Tilled So	oils (C6)	Dry-Season Water Table (C2)				
Drift Deposits (B3)	Thin Muck	Surface (C7)	_	Crayfish Bur	rows (C8)			
Algal Mat or Crust (B4)	Other (Exp	lain in Remarks)	_	Saturation V	isible on Aerial Im	agery (C9)		
Iron Deposits (B5)	_		_	Stunted or S	Stressed Plants (D	1)		
Inundation Visible on Ae	rial Imagery (B7)		_	Geomorphic	Position (D2)			
Water-Stained Leaves (E	39)		_	Shallow Aqu	itard (D3)			
Aquatic Fauna (B13)			_	Microtopogr:	aphic Relief (D4)			
—			7	X FAC-Neutral	l Test (D5)			
Field Observations:								
Surface Water Present?	Yes X No Depth (inc	, 	_					
Water Table Present?	Yes NoX Depth (inc	ches):	_					
Saturation Present?	Yes NoX Depth (inc	ches):	_ Wetland Hydrol	ogy Present?	Yes X	No		
(includes capillary fringe)								
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos	, previous inspections)	, if available:					
Remarks:								
1								

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W004-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: _____) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 70 x 1 = 50% of total cover: 20% of total cover: FACW species 30 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 0 FACU species x 4 = 0 UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = 1.3**Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 0 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha latifolia / Broadleaf cattail, Broad-leaved cattail OBL 2. Scirpus cyperinus / Woolgrass 20 Yes FACW ¹Indicators of hydric soil and wetland hydrology must 3. Juncus effusus / Common bog rush, Soft or lamp rush 10 **FACW** be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.) Recently mowed

SOIL Sampling Point: <u>05-W004-1W</u>

Profile Descri	ption: (Describe to th	ne depth need	ed to document th	e indicator	or confirm	the abse	nce of indicators.)	
Depth Matrix Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	5Y 5/1	97	7.5YR 5/8	3	С	M,PL	Sity Clay Loam	
¹Type: C=Cond	centration, D=Depletion	n, RM=Reduce	ed Matrix, MS=Mask	ed Sand Gra	ains.		² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators fo	r Problematic Hydric Soils³:
Histosol (A1)		Dark Surfac	ce (S7)			2 cm	Muck (A10) (MLRA 147)
Histic Epi	pedon (A2)		Polyvalue E	Below Surfac	e (S8) (M I	LRA 147, 1	148) Coas	st Prairie Redox (A16)
Black His	tic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	47, 148)	(N	/ILRA 147, 148)
Hydroger	Sulfide (A4)		Loamy Gley	ed Matrix (F	2)		Piedr	mont Floodplain Soils (F19)
	Layers (A5)		X Depleted M					/ILRA 136, 147)
	k (A10) (LRR N)			s Surface (F6	3)		•	Shallow Dark Surface (TF12)
Depleted	Below Dark Surface (A	A11)	Depleted D	ark Surface ((F7)		Other	r (Explain in Remarks)
Thick Dar	k Surface (A12)			ressions (F8				
	ucky Mineral (S1)		Iron-Manga	nese Masse	s (F12)			
(LRR N, I	MLRA 147,148)		(LRR N, MI	_RA 136)				
	eyed Matrix (S4)			face (F13) (MLRA 136	5, 122)	3Indicators	s of hydrophytic vegetation and
Sandy Re	edox (S5)		Piedmont F	loodplain So	ils (F19) (I	MLRA 148		and hydrology must be present.
	Matrix (S6)			Material (F2				ss disturbed or problematic.
							I	·
	yer (if observed):							
Type:			_					
Depth (inc	hes):		_				Hydric Soil Pres	sent? Yes X No
Remarks:								

Project/Site:	te: Bright Mountain Solar		Hazard, Perry	County	Sampling Date:	04/12/2022		
Applicant/Owner:	Avangrid Renewal	oles, LLC	Sta	ate: Kentucky	Sampling Point:	05-W005-1U		
Investigator(s):	CM, RMS, JK	Section, Town	ship, Range:	Cit	y of Hazard			
Landform (hillslope, terrace, etc	:): Flat	Local relief (co	oncave, convex, none):	none	Slope	e (%): 0-2		
Subregion (LRR or MLRA):	LRR N L	at: 37.2879	9835 Long:	-83.2978801	I7 Datur	m: WGS 84		
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to	70 percent slopes, be	nched, stony	NWI classification	on:			
	ons on the site typical for this time of y			- explain in Remark	s.)			
		ficantly disturbed?		cumstances" prese	•	X No		
	, or Hydrology natu			in any answers in				
	S - Attach site map showing		,	-	·			
Hydrophytic Vegetation Prese	ent? Yes No	Х						
Hydric Soil Present?	Yes No		the Sampled Area					
Wetland Hydrology Present?			hin a Wetland?	Yes	No X			
Wettand Trydrology Tresent:	103 110 _		a weathing.		X			
Remarks:	d, land recent capped mine disturbed	soil						
Treasuray mener	a, iaira rocont cappoa iiiiio aiciaisca							
HYDROLOGY								
Wetland Hydrology Indicate	ors:							
1	of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)		
Surface Water (A1)	•	quatic Plants (B14)			,	o roquirou)		
High Water Table (A2)		en Sulfide Odor (C1)			Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)			
Saturation (A3)		d Rhizospheres on L			atterns (B10)	Surface (Bo)		
Water Marks (B1)		ce of Reduced Iron (0	• ,		` ,			
Sediment Deposits (B2)		Iron Reduction in Till		Moss Trim Lines (B16) Dry-Season Water Table (C2)				
Drift Deposits (B3)		uck Surface (C7)	ed 30113 (00)	Crayfish Bu	, ,			
Algal Mat or Crust (B4)		Explain in Remarks)			isible on Aerial Im	agon (CO)		
Iron Deposits (B5)	Other (Explain in Remarks)			Stressed Plants (D	, ,		
	wiel Imagen (P7)				,	1)		
Inundation Visible on Ae	5 5 1 7				Position (D2)			
Water-Stained Leaves (I	D9)			Shallow Aqu	, ,			
Aquatic Fauna (B13)					aphic Relief (D4)			
				FAC-Neutra	Test (D5)			
Field Observations:								
Surface Water Present?	Yes No X Depth	(inches):						
Water Table Present?	Yes No X Depth	(inches):						
Saturation Present?		(inches):	Wetland Hydi	rology Present?	Yes	No X		
(includes capillary fringe)								
Describe Recorded Data (stre	eam gauge, monitoring well, aerial pho	otos, previous inspect	tions), if available:					
Remarks:								

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W005-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 95 FACU species x 4 = UPL species 5 x 5 = 100 Column Totals: (A) Prevalence Index = B/A = 4.05 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5) Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem **FACU** 15 2. Poa pratensis / Kentucky blue grass No FACU ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 5 NI be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W005-1U

Depth	ription: (Describe to t Matrix	ne aepth ne		ne indicator of K Features	or confirm	ine absend	ce of indicator	າຮ.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remarks	
0-5	2.5Y 5/2	100			C		Silt Loam	Heavily di		om mining, rocky
						·				
		<u> </u>								
		- DM-Dad	eard Matrix MC-Mark	Load Count Cur	·		21	-tion, DI -D	ana Limina Mal	Matrix
Hydric Soil II	centration, D=Depletion	on, Rivi=Redi	iced Matrix, M5=Masi	ked Sand Gra	ains.				ore Lining, M=I	
Histosol			Dark Surfa	ce (S7)					110) (MLRA 1 4	
Histic Ep	ipedon (A2)		Polyvalue l	Below Surfac	e (S8) (ML	.RA 147, 14	18) C	oast Prairie	Redox (A16)	·
Black His				Surface (S9)		7, 148)		(MLRA 14		
	n Sulfide (A4)			yed Matrix (F	2)		_ P		odplain Soils (F19)
	Layers (A5)		Depleted N		• •			(MLRA 13		(TE40)
	ck (A10) (LRR N)	(A 11)		k Surface (F6				-	Dark Surface	(TF12)
	l Below Dark Surface (irk Surface (A12)	(A11)		ark Surface or pressions (F8			_ ~	ıtılei (⊏xpiai	n in Remarks)	
	lucky Mineral (S1)			anese Masse						
	MLRA 147,148)		(LRR N, M		3 (1 12)					
	leyed Matrix (S4)			rface (F13) (MLRA 136	. 122)	3Indica	tors of hvdr	ophytic vegeta	tion and
	edox (S5)			Floodplain So		-			ology must be	
	Matrix (S6)			t Material (F2					oed or problem	
	ayer (if observed):									
Type: Depth (in	ches):						Hydric Soil F	Present?	Yes	NoX
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry (County	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renewable	s, LLC	Sta	ite: Kentucky	Sampling Point:	05-W005-1U
Investigator(s):	CM, RMS, JK	Section, Towns	nip, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	c): Flat	Local relief (cor	ncave, convex, none):	none	Slope	e (%): 0-2
Subregion (LRR or MLRA):	LRR N Lat:	37.28798	35 Long:	-83.297880	17 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70	percent slopes, bene	ched, stony	NWI classification	on:	
	ons on the site typical for this time of yea			- explain in Remark	s.)	
		antly disturbed?		umstances" prese	*	X No
	, or Hydrology natural			in any answers in		
	S - Attach site map showing s		,	-	•	
Hydrophytic Vegetation Prese	ent? Yes No	x				
Hydric Soil Present?			e Sampled Area			
Wetland Hydrology Present?			in a Wetland?	Yes	No X	
Remarks:	d, land recent capped mine disturbed soi	1				
HADBOI OCA						
HYDROLOGY						
Wetland Hydrology Indicate				0	-t (in:	h
	of one required: check all that apply)				ators (minimum of	two required)
Surface Water (A1)		atic Plants (B14)			Cracks (B6)	
High Water Table (A2)		Sulfide Odor (C1)			getated Concave	Surface (B8)
Saturation (A3)		Rhizospheres on Liv	• ,		atterns (B10)	
Water Marks (B1)		of Reduced Iron (C4		Moss Trim L	, ,	
Sediment Deposits (B2)	· · · · · · · · · · · · · · · · · · ·	on Reduction in Tilled	3 Soils (C6)		Water Table (C2)	
Drift Deposits (B3)		Surface (C7)		Crayfish Bu	, ,	(22)
Algal Mat or Crust (B4)	Other (Ex	plain in Remarks)			/isible on Aerial Im	, ,
Iron Deposits (B5)					Stressed Plants (D	1)
Inundation Visible on Ae	• • • •				Position (D2)	
Water-Stained Leaves (I	39)			Shallow Aqu	, ,	
Aquatic Fauna (B13)					aphic Relief (D4)	
				FAC-Neutra	l Test (D5)	
Field Observations:						
Surface Water Present?	Yes No X Depth (ii	nches):				
Water Table Present?	Yes No X Depth (ii	·				
Saturation Present?	Yes No X Depth (ii		Wetland Hydr	ology Present?	Yes	No X
(includes capillary fringe)	105 100X Dopin (ii		— Welland Hydr	ology i resemi.	103	. No <u>X</u>
(molades dapillary limge)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photo	s, previous inspection	ons), if available:			
Remarks:						
i						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W005-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 95 FACU species x 4 = UPL species 5 x 5 = 100 Column Totals: (A) Prevalence Index = B/A = 4.05 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5) Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem FACU 15 2. Poa pratensis / Kentucky blue grass No FACU ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 5 NI be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W005-1U

Depth	ription: (Describe to t Matrix	ne aepth ne		ne indicator of K Features	or confirm	ine absend	ce of indicator	າຮ.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remarks	
0-5	2.5Y 5/2	100			C		Silt Loam	Heavily di		om mining, rocky
						·				
		<u> </u>								
		- DM-Dad	eard Matrix MC-Mark	Load Count Cur	·		21	ations DI –D	ana Limina Mal	Matrix
Hydric Soil II	centration, D=Depletion	on, Rivi=Redi	iced Matrix, M5=Masi	ked Sand Gra	ains.				ore Lining, M=I	
Histosol			Dark Surfa	ce (S7)					110) (MLRA 1 4	
Histic Ep	ipedon (A2)		Polyvalue l	Below Surfac	e (S8) (ML	.RA 147, 14	18) C	oast Prairie	Redox (A16)	·
Black His				Surface (S9)		7, 148)		(MLRA 14		
	n Sulfide (A4)			yed Matrix (F	2)		_ P		odplain Soils (F19)
	Layers (A5)		Depleted N		• •			(MLRA 13		(TE40)
	ck (A10) (LRR N)	(A 11)		k Surface (F6				-	Dark Surface	(TF12)
	l Below Dark Surface (irk Surface (A12)	(A11)		ark Surface or pressions (F8			_ ~	ıtılei (⊏xpiai	n in Remarks)	
	lucky Mineral (S1)			anese Masse						
	MLRA 147,148)		(LRR N, M		3 (1 12)					
	leyed Matrix (S4)			rface (F13) (MLRA 136	. 122)	3Indica	tors of hvdr	ophytic vegeta	tion and
	edox (S5)			Floodplain So		-			ology must be	
	Matrix (S6)			t Material (F2					oed or problem	
	ayer (if observed):									
Type: Depth (in	ches):						Hydric Soil F	Present?	Yes	NoX
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry 0	County	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renewables,	LLC	Sta	te: Kentucky	Sampling Point:	05-W005-1W
Investigator(s):	CM, RMS, JK	Section, Township,	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	e): Bowl shaped depression	Local relief (concav	/e, convex, none):	concave	e Slope	e (%): 2-5
Subregion (LRR or MLRA):		37.28914833		-83.302148		, ,
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe			NWI classification		
· · · · · · · · · · · · · · · · · · ·	ons on the site typical for this time of year?			explain in Remark		
Are Vegetation X , Soil	· · · · · · · · · · · · · · · · · · ·	tly disturbed?	Are "Normal Circ	•	,	X No
	, or Hydrology naturally p	-	(If needed, explai	•		<u> </u>
			,	-	•	
SUMMART OF FINDING	S - Attach site map showing sar	nping point loca	ations, transect	s, important	eatures, etc.	
Hydrophytic Vegetation Prese						
Hydric Soil Present?	Yes <u>X</u> No	Is the S	ampled Area			
Wetland Hydrology Present?		within a	Wetland?	Yes X	No	
5 .					<u> </u>	
Remarks:	red recently, soil reclaimed coal mine					
vegetation mow	ed recently, son reclaimed coal mille					
HYDROLOGY						
Wetland Hydrology Indicate						
, ,,				Casandam, India		: h
	of one required: check all that apply)	DI ((D11)			tors (minimum of	two required)
X Surface Water (A1)		Plants (B14)			Cracks (B6)	0 ((00)
High Water Table (A2)		ulfide Odor (C1)			getated Concave	Surface (B8)
Saturation (A3)		izospheres on Living	Roots (C3)	Drainage Pa	itterns (B10)	
Water Marks (B1)	Presence of	Reduced Iron (C4)		Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Recent Iron	Reduction in Tilled So	oils (C6)	Dry-Season	Water Table (C2)	1
Drift Deposits (B3)	Thin Muck S	Surface (C7)		Crayfish Bui	rows (C8)	
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)		Saturation V	isible on Aerial In	nagery (C9)
Iron Deposits (B5)	_ ` `	,			Stressed Plants (D	, ,
Inundation Visible on Ae	erial Imagery (B7)				Position (D2)	.,
Water-Stained Leaves (E				Shallow Aqu		
· - ·	59)					
Aquatic Fauna (B13)					aphic Relief (D4)	
				X FAC-Neutra	rest (D5)	
Field Observations:						
Surface Water Present?	Yes X No Depth (inch	hes): 6				
Water Table Present?	Yes No X Depth (inch	· —	-			
Saturation Present?			- Wotland Hydr	ology Procent?	Voc. V	No
	Yes NoX Depth (inch	ies).	- Welland Hydro	ology Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge monitoring well aerial photos	previous inspections)	if available:			
Besonbe Recorded Bata (Stre	zam gaage, memoring wen, achai photos,	previous inspections)	, ii availabio.			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W005-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: _____) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 100 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = 0 UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = 2.0 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) Juncus effusus / Common bog rush, Soft or lamp rush **FACW** 2. Scirpus cyperinus / Woolgrass 20 **FACW** ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover Hydrophytic 50% of total cover: 0 20% of total cover: 0 Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.) Recently mowed

SOIL Sampling Point: <u>05-W005-1W</u>

	ription: (Describe to the	ne depth need			or confirm	the abse	nce of indicators	.)	
Depth (inches)	Matrix Color (moist)	%		Features %	Typo1	Loc²	Toyturo	Pomarka	
(inches)			Color (moist)		Type ¹		Texture	Remarks	
0-6	5Y 5/2	98	10YR 5/8	2	<u> </u>	M	Sity Clay Loam		
	-								
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Locat	ion: PL=Pore Lining, M=Mat	trix.
Hydric Soil II	ndicators:						Indicators	for Problematic Hydric So	nile3.
Histosol			Dark Surfac	o (S7)				m Muck (A10) (MLRA 147)	
	ipedon (A2)			Below Surfac	o (S8) (MI	DA 147		ast Prairie Redox (A16)	
								, ,	
Black His				Surface (S9)		7, 148)		(MLRA 147, 148)	2)
	n Sulfide (A4)			yed Matrix (F	·2)			dmont Floodplain Soils (F19	9)
	Layers (A5)		X Depleted M		2)			(MLRA 136, 147)	-10)
	ck (A10) (LRR N)	• 440		Surface (F6				ry Shallow Dark Surface (TF	-12)
	Below Dark Surface (A	411)		ark Surface			Oth	ner (Explain in Remarks)	
_	rk Surface (A12)			ressions (F8					
	ucky Mineral (S1)			nese Masse	s (F12)				
	MLRA 147,148)		(LRR N, ML	•					
	leyed Matrix (S4)			face (F13) (ors of hydrophytic vegetation	
	edox (S5)			loodplain So				tland hydrology must be pre	
Stripped	Matrix (S6)		Red Parent	Material (F2	21) (MLRA	127, 147) unl	ess disturbed or problemation	c.
Restrictive L	ayer (if observed):								
Type:	uyo. (ozoo. rou).								
Depth (in	ches).						Hydric Soil Pr	esent? Yes X	No
Boptii (iiii							i i yano ooni i i	<u> </u>	
Remarks:									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	County	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renewables,	LLC	Stat	e: Kentucky	Sampling Point:	05-W006-1w
Investigator(s):	CM, RMS, JK	Section, Township,	Range:	City	y of Hazard	
Landform (hillslope, terrace, etc): Bowl shaped depression	Local relief (concav	e, convex, none):	concave	e Slope	e (%): 2-5
Subregion (LRR or MLRA):		37.28798017	Long:	-83.297577	Z Datu	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe	rcent slopes, bencher	d, stony	NWI classification	n:	
· · · · · · · · · · · · · · · · · · ·	ons on the site typical for this time of year?			explain in Remarks		
Are Vegetation X , Soil	· · · · · · · · · · · · · · · · · · ·	tly disturbed?	Are "Normal Circu	•	•	X No
	, or Hydrology naturally	=	(If needed, explai	•		<u> </u>
	S - Attach site map showing sar		,	-	•	
			ations, transect	s, important i	eatures, etc.	
Hydrophytic Vegetation Prese		_				
Hydric Soil Present?	Yes X No		ampled Area			
Wetland Hydrology Present?	YesX No	within a	Wetland?	Yes X	No	_
Remarks:		I				
	red recently, soil reclaimed coal mine					
	•					
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
Primary Indicators (minimum	of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)
X Surface Water (A1)	True Aquatio	Plants (B14)		Surface Soil	Cracks (B6)	
High Water Table (A2)	Hvdrogen Si	ulfide Odor (C1)			getated Concave	Surface (B8)
Saturation (A3)		izospheres on Living I	Roots (C3)	Drainage Pa	_	,
Water Marks (B1)		Reduced Iron (C4)	. 10010 (00)	Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled So	nile (C6)		Water Table (C2)	
Drift Deposits (B3)	Thin Muck S		nis (00)	Crayfish Bur	` ,	
		, ,				
Algal Mat or Crust (B4)	Other (Expia	in in Remarks)			isible on Aerial Im	
Iron Deposits (B5)					tressed Plants (D	1)
Inundation Visible on Ae	• • • •				Position (D2)	
Water-Stained Leaves (F	39)			Shallow Aqu	, ,	
Aquatic Fauna (B13)				Microtopogra	aphic Relief (D4)	
				X FAC-Neutral	Test (D5)	
Field Observations:						
Surface Water Present?	Yes X No Depth (incl	nes): 6				
Water Table Present?	Yes No X Depth (incl	, 	-			
			- Wetlevel Hedr	alamı Duasanto	V V	Na
Saturation Present?	Yes No X Depth (incl	ies):	- wetland Hydro	ology Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos.	previous inspections)	. if available:			
		F	,			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W006-1w **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 100 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = 0 UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = 2.0 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Juncus effusus / Common bog rush, Soft or lamp rush **FACW** 2. Scirpus cyperinus / Woolgrass 20 **FACW** ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover Hydrophytic 50% of total cover: 0 20% of total cover: 0 Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.) Recently mowed

SOIL Sampling Point: <u>05-W006-1w</u>

	ption: (Describe to th	e depth neede			or confirm	the abser	nce of indicators	s.)		
Depth (in aboa)	Matrix			r Features	T 1	12	T		D	
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture		Remarks	
0-6	5Y 5/2	98	10YR 5/8	2	<u> </u>	M	Slty Clay Loam			
¹Type: C=Con	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ked Sand Gra	ins.		²Loca	tion: PL=Po	ore Lining, M=Mat	rix.
Hydric Soil In	dicators:						Indicators	for Proble	ematic Hydric So	ils³:
Histosol (A1)		Dark Surfa	ce (S7)			2 0	cm Muck (A	(10) (MLRA 147)	
	pedon (A2)			Below Surface	e (S8) (ML	RA 147. 1			Redox (A16)	
Black His				Surface (S9)			<i>'</i>	(MLRA 14		
	Sulfide (A4)			yed Matrix (F		,,	Pie	-	odplain Soils (F19	9)
	Layers (A5)		X Depleted M		-,			(MLRA 13		,
	ck (A10) (LRR N)			k Surface (F6	;)		Vo	-	Dark Surface (TF	12)
	Below Dark Surface (A	11)			•			-	•	12)
	k Surface (A12))		ark Surface (pressions (F8)			01	nei (Expiai	n in Remarks)	
	ucky Mineral (S1)			anese Masses	S (F12)					
•	MLRA 147,148)		(LRR N, M	-			a			
	eyed Matrix (S4)			face (F13) (ophytic vegetation	
Sandy Re				Floodplain So					ology must be pre	
Stripped	Matrix (S6)		Red Parent	t Material (F2	1) (MLRA	127, 147)) un	less disturb	oed or problemation) .
Restrictive La	ayer (if observed):									
Type:	,									
Depth (inc	hes):		_				Hydric Soil Pi	resent?	Yes X	No
			_				,			
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	County	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renewables,	LLC	Stat	e: Kentucky	Sampling Point:	05-W006-1w
Investigator(s):	CM, RMS, JK	Section, Township,	Range:	City	y of Hazard	
Landform (hillslope, terrace, etc	:): Bowl shaped depression	Local relief (concav	e, convex, none):	concave	e Slope	e (%): 2-5
Subregion (LRR or MLRA):		37.28798017	Long:	-83.297577	Z Datu	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe	rcent slopes, bencher	d, stony	NWI classification	n:	
· · · · · · · · · · · · · · · · · · ·	ons on the site typical for this time of year?			explain in Remarks		
Are Vegetation X , Soil	· · · · · · · · · · · · · · · · · · ·	tly disturbed?	Are "Normal Circu	•	•	X No
	, or Hydrology naturally	=	(If needed, explai	•		<u> </u>
	S - Attach site map showing sar		,	-	•	
			ations, transect	s, important i	eatures, etc.	
Hydrophytic Vegetation Prese		_				
Hydric Soil Present?	Yes X No		ampled Area			
Wetland Hydrology Present?	YesX No	within a	Wetland?	Yes X	No	_
Remarks:		I				
	red recently, soil reclaimed coal mine					
	•					
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
Primary Indicators (minimum	of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)
X Surface Water (A1)	True Aquatio	Plants (B14)		Surface Soil	Cracks (B6)	
High Water Table (A2)	Hvdrogen Si	ulfide Odor (C1)			getated Concave	Surface (B8)
Saturation (A3)		izospheres on Living I	Roots (C3)	Drainage Pa	_	,
Water Marks (B1)		Reduced Iron (C4)	. 10010 (00)	Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled So	nile (C6)		Water Table (C2)	
Drift Deposits (B3)	Thin Muck S		nis (00)	Crayfish Bur	` ,	
		, ,				
Algal Mat or Crust (B4)	Other (Expia	in in Remarks)			isible on Aerial Im	
Iron Deposits (B5)					tressed Plants (D	1)
Inundation Visible on Ae	• • • •				Position (D2)	
Water-Stained Leaves (F	39)			Shallow Aqu	, ,	
Aquatic Fauna (B13)				Microtopogra	aphic Relief (D4)	
				X FAC-Neutral	Test (D5)	
Field Observations:						
Surface Water Present?	Yes X No Depth (incl	nes): 6				
Water Table Present?	Yes No X Depth (incl	, 	-			
			- Wetlevel Hedr	alamı Duasanto	V V	Na
Saturation Present?	Yes No X Depth (incl	ies):	- wetland Hydro	ology Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos.	previous inspections)	. if available:			
		F	,			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W006-1w **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 100 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = 0 UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = 2.0 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Juncus effusus / Common bog rush, Soft or lamp rush **FACW** 2. Scirpus cyperinus / Woolgrass 20 **FACW** ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover Hydrophytic 50% of total cover: 0 20% of total cover: 0 Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.) Recently mowed

SOIL Sampling Point: <u>05-W006-1w</u>

	ption: (Describe to th	e depth neede			or confirm	the abser	nce of indicators	s.)		
Depth (in aboa)	Matrix			r Features	T 1	12	T		D	
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture		Remarks	
0-6	5Y 5/2	98	10YR 5/8	2	<u> </u>	M	Slty Clay Loam			
¹Type: C=Con	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ked Sand Gra	ins.		²Loca	tion: PL=Po	ore Lining, M=Mat	rix.
Hydric Soil In	dicators:						Indicators	for Proble	ematic Hydric So	ils³:
Histosol (A1)		Dark Surfa	ce (S7)			2 0	cm Muck (A	(10) (MLRA 147)	
	pedon (A2)			Below Surface	e (S8) (ML	RA 147. 1			Redox (A16)	
Black His				Surface (S9)			<i>'</i>	(MLRA 14		
	Sulfide (A4)			yed Matrix (F		,,	Pie	-	odplain Soils (F19	9)
	Layers (A5)		X Depleted M		-,			(MLRA 13		,
	ck (A10) (LRR N)			k Surface (F6	;)		Vo	-	Dark Surface (TF	12)
	Below Dark Surface (A	11)			•			-	•	12)
	k Surface (A12))		ark Surface (pressions (F8)			01	nei (Expiai	n in Remarks)	
	ucky Mineral (S1)			anese Masses	S (F12)					
•	MLRA 147,148)		(LRR N, M	-			a			
	eyed Matrix (S4)			face (F13) (ophytic vegetation	
Sandy Re				Floodplain So					ology must be pre	
Stripped	Matrix (S6)		Red Parent	t Material (F2	1) (MLRA	127, 147)) un	less disturb	oed or problemation) .
Restrictive La	ayer (if observed):									
Type:	,									
Depth (inc	hes):		_				Hydric Soil Pi	resent?	Yes X	No
			_				,			
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Rene	wables, LLC	State	e: Kentucky	Sampling Point:	05-W007-1W
Investigator(s):	CM, RMS, JK	Section, Townshi	p, Range:	Ci	ty of Hazard	
Landform (hillslope, terrace, etc.	e): Bowl shaped depression	Local relief (conc	ave, convex, none):	concav	e Slope	e (%): <u>2-5</u>
Subregion (LRR or MLRA):	LRR N	Lat: 37.286466	5 Long:	-83.298175	83 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2	to 70 percent slopes, bench	ned, stony	NWI classification	on:	
Are climatic / hydrologic condition	ons on the site typical for this time	of year? Yes X	No (If no, e	xplain in Remark	s.)	
		ignificantly disturbed?	Are "Normal Circu	mstances" prese	ent? Yes	X No
Are Vegetation, Soil	, or Hydrologyn	aturally problematic?	(If needed, explain	n any answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map showi	ng sampling point lo	cations, transects	s, important	features, etc.	
Hydrophytic Vegetation Prese	ent? Yes X No	,				
Hydric Soil Present?	Yes X No	ls the	Sampled Area			
Wetland Hydrology Present?	Yes X No		a Wetland?	Yes X	No	
Remarks: Reclaimed coal	mine					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
1	of one required: check all that app	ly)		Secondary Indic	ators (minimum of	two required)
X Surface Water (A1)	True	Aquatic Plants (B14)		Surface Soi	l Cracks (B6)	
High Water Table (A2)	Hyd	rogen Sulfide Odor (C1)		Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	Oxic	lized Rhizospheres on Livin	g Roots (C3)	Drainage P	atterns (B10)	
Water Marks (B1)		sence of Reduced Iron (C4)	,	Moss Trim I	, ,	
Sediment Deposits (B2)		ent Iron Reduction in Tilled	Soils (C6)		Water Table (C2)	
Drift Deposits (B3)		Muck Surface (C7)	,	Crayfish Bu		(22)
Algal Mat or Crust (B4)	Othe	er (Explain in Remarks)	•		/isible on Aerial Im	
Iron Deposits (B5)	wiel Imagen (P7)				Stressed Plants (D	1)
Inundation Visible on Ae Water-Stained Leaves (I	• • • •			Shallow Aq	Position (D2)	
Aquatic Fauna (B13)	33)		•		raphic Relief (D4)	
				X FAC-Neutra		
			<u> </u>			
Field Observations:						
Surface Water Present?		epth (inches): 2	_			
Water Table Present?		epth (inches): 0	-	. 5	V V	
Saturation Present?	Yes X No De	epth (inches): 0	Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial	photos, previous inspection	s), if available:			
Remarks:						
1						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W007-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 85 x 1 = 50% of total cover: 20% of total cover: FACW species 15 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.15**Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha latifolia / Broadleaf cattail, Broad-leaved cattail OBL 2. Juncus effusus / Common bog rush, Soft or lamp rush 15 No FACW ¹Indicators of hydric soil and wetland hydrology must 3. Juncus pylaei / Common rush 5 be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W007-1W</u>

	ription: (Describe to th	ne depth need			or confirm	the absen	nce of indicators	s.)		
Depth (inches)	Matrix Color (moist)	%		Features %	Typo1	Loc²	Toyturo		Remarks	
(inches)			Color (moist)		Type ¹		Clay Learn		Remarks	
0-6	5Y 5/1	99	7.5YR 4/6	1	<u> </u>	<u>M</u>	Clay Loam			
				· ——						
				. ——						
	-									
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	tion: PL=Pore l	_ining, M=Mat	rix.
Hydric Soil I	ndicators:						Indicators	for Problema	tic Hydric Soi	ils³:
Histosol			Dark Surfac	ce (S7)				cm Muck (A10)		
_	ipedon (A2)			Below Surfac	e (S8) (MI	RΔ 147 1		ast Prairie Red		
Black Hi				Surface (S9)				(MLRA 147, 1	, ,	
						7, 140)	D:	•	-	\
	n Sulfide (A4)			yed Matrix (F	-2)		<u> </u>	edmont Floodpl)
	Layers (A5)		X Depleted M		2)			(MLRA 136, 1	•	10)
_	ck (A10) (LRR N)			Surface (F6				ry Shallow Dar	•	12)
_	Below Dark Surface (A	A11)		ark Surface			Ot	her (Explain in	Remarks)	
	rk Surface (A12)			ressions (F8						
	ucky Mineral (S1)			inese Masse	s (F12)					
(LRR N,	MLRA 147,148)		(LRR N, MI	LRA 136)						
Sandy G	leyed Matrix (S4)		Umbric Sur	face (F13) (MLRA 136	, 122)	³Indicat	ors of hydrophy	ytic vegetation	and
Sandy R	edox (S5)		Piedmont F	loodplain So	ils (F19) (N	ILRA 148)	we	tland hydrolog	y must be pres	sent.
Stripped	Matrix (S6)		Red Parent	: Material (F2	21) (MLRA	127, 147)	un	less disturbed	or problematic	i.
			_						-	
Restrictive L	ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil P	resent?	/es X	No
							-			
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Rene	wables, LLC	State	e: Kentucky	Sampling Point:	05-W007-1W
Investigator(s):	CM, RMS, JK	Section, Townshi	p, Range:	Ci	ty of Hazard	
Landform (hillslope, terrace, etc.	e): Bowl shaped depression	Local relief (conc	ave, convex, none):	concav	e Slope	e (%): <u>2-5</u>
Subregion (LRR or MLRA):	LRR N	Lat: 37.286466	5 Long:	-83.298175	83 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2	to 70 percent slopes, bench	ned, stony	NWI classification	on:	
Are climatic / hydrologic condition	ons on the site typical for this time	of year? Yes X	No (If no, e	xplain in Remark	s.)	
		ignificantly disturbed?	Are "Normal Circu	mstances" prese	ent? Yes	X No
Are Vegetation, Soil	, or Hydrologyn	aturally problematic?	(If needed, explain	n any answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map showi	ng sampling point lo	cations, transects	s, important	features, etc.	
Hydrophytic Vegetation Prese	ent? Yes X No	,				
Hydric Soil Present?	Yes X No	ls the	Sampled Area			
Wetland Hydrology Present?	Yes X No		a Wetland?	Yes X	No	
Remarks: Reclaimed coal	mine					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
1	of one required: check all that app	ly)		Secondary Indic	ators (minimum of	two required)
X Surface Water (A1)	True	Aquatic Plants (B14)		Surface Soi	l Cracks (B6)	
High Water Table (A2)	Hyd	rogen Sulfide Odor (C1)		Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	Oxic	lized Rhizospheres on Livin	g Roots (C3)	Drainage P	atterns (B10)	
Water Marks (B1)		sence of Reduced Iron (C4)	,	Moss Trim I	, ,	
Sediment Deposits (B2)		ent Iron Reduction in Tilled	Soils (C6)		Water Table (C2)	
Drift Deposits (B3)		Muck Surface (C7)	,	Crayfish Bu		(22)
Algal Mat or Crust (B4)	Othe	er (Explain in Remarks)	•		/isible on Aerial Im	
Iron Deposits (B5)	wiel Imagen (P7)				Stressed Plants (D	1)
Inundation Visible on Ae Water-Stained Leaves (I	• • • •			Shallow Aq	Position (D2)	
Aquatic Fauna (B13)	33)		•		raphic Relief (D4)	
				X FAC-Neutra		
			<u> </u>			
Field Observations:						
Surface Water Present?		epth (inches): 2	_			
Water Table Present?		epth (inches): 0	-	. 5	V V	
Saturation Present?	Yes X No De	epth (inches): 0	Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial	photos, previous inspection	s), if available:			
Remarks:						
1						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W007-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 85 x 1 = 50% of total cover: 20% of total cover: FACW species 15 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.15**Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha latifolia / Broadleaf cattail, Broad-leaved cattail OBL 2. Juncus effusus / Common bog rush, Soft or lamp rush 15 No FACW ¹Indicators of hydric soil and wetland hydrology must 3. Juncus pylaei / Common rush 5 be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W007-1W</u>

	ription: (Describe to th	ne depth need			or confirm	the absen	nce of indicators	s.)		
Depth (inches)	Matrix Color (moist)	%		Features %	Typo1	Loc²	Toyturo		Remarks	
(inches)			Color (moist)		Type ¹		Clay Learn		Remarks	
0-6	5Y 5/1	99	7.5YR 4/6	1	<u> </u>	<u>M</u>	Clay Loam			
				· ——						
				. ——						
	-									
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	tion: PL=Pore l	_ining, M=Mat	rix.
Hydric Soil I	ndicators:						Indicators	for Problema	tic Hydric Soi	ils³:
Histosol			Dark Surfac	ce (S7)				cm Muck (A10)		
_	ipedon (A2)			Below Surfac	e (S8) (MI	RΔ 147 1		ast Prairie Red		
Black Hi				Surface (S9)				(MLRA 147, 1	, ,	
						7, 140)	D:	•	-	\
	n Sulfide (A4)			yed Matrix (F	-2)		<u> </u>	edmont Floodpl)
	Layers (A5)		X Depleted M		2)			(MLRA 136, 1	•	10)
_	ck (A10) (LRR N)			Surface (F6				ry Shallow Dar	•	12)
_	Below Dark Surface (A	A11)		ark Surface			Ot	her (Explain in	Remarks)	
	rk Surface (A12)			ressions (F8						
	ucky Mineral (S1)			inese Masse	s (F12)					
(LRR N,	MLRA 147,148)		(LRR N, MI	LRA 136)						
Sandy G	leyed Matrix (S4)		Umbric Sur	face (F13) (MLRA 136	, 122)	³Indicat	ors of hydrophy	ytic vegetation	and
Sandy R	edox (S5)		Piedmont F	loodplain So	ils (F19) (N	ILRA 148)	we	tland hydrolog	y must be pres	sent.
Stripped	Matrix (S6)		Red Parent	: Material (F2	21) (MLRA	127, 147)	un	less disturbed	or problematic	i.
			_						-	
Restrictive L	ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil P	resent?	/es X	No
							-			
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry	County	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renew	ables, LLC	Sta	te: Kentucky	Sampling Point:	05-W008-1U
Investigator(s):	CM, RMS, JK	Section, Towns	ship, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	e): Hillslope	Local relief (co	ncave, convex, none):	none	Slope	e (%): 50
Subregion (LRR or MLRA):	LRR N	Lat: 37.28440	183 Long:	-83.297854	5 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 t	o 70 percent slopes, ber	iched, stony	NWI classification	on:	
	ons on the site typical for this time o			explain in Remark		
		nificantly disturbed?		umstances" prese	,	X No
	, or Hydrology na			in any answers in		
	S - Attach site map showir			=	·	
Hydrophytic Vegetation Prese	•	х		, p		
Hydric Soil Present?	Yes No		ne Sampled Area			
Wetland Hydrology Present?			nin a Wetland?	Yes	No X	
Wettand Trydrology Fresent:	163 140		iii a wettana:	163		
Remarks:	and assistant when all and					
land recent cap	ped mine disturbed soil					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
Primary Indicators (minimum	of one required: check all that apply	/)		Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	True	Aquatic Plants (B14)	·	Surface Soi	Cracks (B6)	
High Water Table (A2)	Hydro	ogen Sulfide Odor (C1)		Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	Oxidi	zed Rhizospheres on Liv	ring Roots (C3)	Drainage Pa	atterns (B10)	
Water Marks (B1)	Prese	ence of Reduced Iron (C	4)	Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Rece	nt Iron Reduction in Tille	ed Soils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin	Muck Surface (C7)		Crayfish Bu	rows (C8)	
Algal Mat or Crust (B4)	Othe	r (Explain in Remarks)		Saturation \	isible on Aerial Im	agery (C9)
Iron Deposits (B5)	_			Stunted or S	Stressed Plants (D	1)
Inundation Visible on Ae	erial Imagery (B7)			Geomorphic	Position (D2)	
Water-Stained Leaves (B9)			Shallow Aqu	itard (D3)	
Aquatic Fauna (B13)	·			Microtopogr	aphic Relief (D4)	
				FAC-Neutra	Test (D5)	
Field Observations						
Field Observations:		0.6.1				
Surface Water Present?		oth (inches):				
Water Table Present?		oth (inches):			.,	
Saturation Present?	Yes NoX Dep	oth (inches):	Wetland Hydr	ology Present?	Yes	No X
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial p	photos, previous inspecti	ons), if available:			
·						
Remarks:						
ixemarks.						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W008-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 4 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species 0 x 1 = 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 1. Rosa multiflora / Multiflora rose, Multiflora rosa 70 FACU species x 4 = UPL species 35 x 5 = 175 Column Totals: 105 (A) Prevalence Index = B/A = 4.33 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 5 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 2 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem **FACU** 2. Phleum pratense / Common timothy, Cultivated timothy FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 20 Yes NI be present, unless disturbed or problematic. 4. Vicia cracca ssp. tenuifolia / Cow vetch 15 No NI **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W008-1U

	iption: (Describe to th	ne depth need			or confirm	the absen	ce of indicator	rs.)		
Depth	Matrix			Features						
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-18	10YR 5/3	95	10YR 5/8	05	<u>C</u>	<u>M</u>	Silt Loam	Heavily dis	sturbed soils from	m mining, rocky r
				· ——						
	-									
				. ——				-		
								1		
¹Type: C=Con	centration, D=Depletion	n, RM=Reduce	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	ation: PL=Po	ore Lining, M=Ma	atrix.
Hydric Soil Ir	idicators:						Indicator	s for Proble	ematic Hydric S	oils³:
Histosol	(A1)		Dark Surfac	ce (S7)			2	cm Muck (A	(10) (MLRA 147	")
Histic Ep	ipedon (A2)		Polyvalue E	Below Surfac	e (S8) (ML	.RA 147, 1	48) C	oast Prairie	Redox (A16)	
Black His	stic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 14	7, 148)	
	n Sulfide (A4)			yed Matrix (F	2)		P		odplain Soils (F´	19)
	Layers (A5)		Depleted M					(MLRA 13	•	
_	ck (A10) (LRR N)			k Surface (F6	•			-	Dark Surface (T	F12)
_	Below Dark Surface (A	A11)		ark Surface (<u> </u>	ther (Explain	n in Remarks)	
	rk Surface (A12)			ressions (F8						
	ucky Mineral (S1)			nese Masse	s (F12)					
-	MLRA 147,148)		(LRR N, ML		MI DA 126	122\	3lp.dio.a	tore of budre	anhutia vagatatis	and .
	leyed Matrix (S4) edox (S5)			face (F13) (Ioodplain So		-			ophytic vegetation blogy must be pr	
	Matrix (S6)			: Material (F2					ology must be problemated	
Suipped	Watrix (30)		Red Falent	. iviateriai (i 2	(IVILIXA	121, 141)	u u	niess distuit	bed of problema	iic.
Restrictive La	ayer (if observed):									
Type:										
Depth (inc	ches):						Hydric Soil F	resent?	Yes	No X
Damanika						·				
Remarks:										

Project/Site:	Bright Mou	ntain Solar		City/Coun	ntv:	Hazard, Perry	County	Sampling Da	ate:	04/12/2022
Applicant/Owner:			grid Renewables. I	-		-	ate: Kentucky	Sampling Po		05-W008-1W
Investigator(s):	JK C	SRMS	<u>g</u>	Section, 7	Township, Rar	nae:	Ci	ty of Hazard	_	
Landform (hillslope, terrace, etc	c):	HillsC	Ope	-	• •	onvex, none):	concav	•	Slope (%	%): 3-6
Subregion (LRR or MLRA):		RR N	Lat:	_	2843705	Long:	-83.297944		Datum:	WGS 84
Soil Map Unit Name:	Fairpoint a	and Betheso	la soils, 2 to 70 pe				NWI classificati			
Are climatic / hydrologic conditi							– , explain in Remarl	(s.)		
Are Vegetation X , Soil			-	tly disturbed		`	cumstances" prese	,	Х	No
Are Vegetation , Soil				oroblematic?		If needed, expl	ain any answers in	Remarks.)		
SUMMARY OF FINDING						•	-	•	etc.	
Hydrophytic Vegetation Pres				<u> </u>		,	,	,		
Hydric Soil Present?	enti	_	X No X No	-	Is the Samp	lod Aros				
Wetland Hydrology Present?			X No	-	within a We		Yes X	No		
Welland Hydrology Fresent:		163	<u> </u>	_	within a vve	tialiu:	163			
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicat										
Primary Indicators (minimum	of one requir	ed: check a					Secondary Indic	-	n of two	o required)
Surface Water (A1)			True Aquatio					il Cracks (B6)	_	
High Water Table (A2)			Hydrogen St			. (00)		egetated Conc	ave Sur	rface (B8)
Saturation (A3)				•	on Living Roo	ts (C3)		atterns (B10)		
Water Marks (B1)			Presence of		,	00)	Moss Trim	. ,	(00)	
Sediment Deposits (B2)					n Tilled Soils (C6)		Water Table	(C2)	
Drift Deposits (B3)			Thin Muck S				Crayfish Bu	, ,		(CO)
Algal Mat or Crust (B4)			Other (Expla	ıın ın Kemar	KS)			Visible on Aeri	•	ery (C9)
Iron Deposits (B5)		(DZ)						Stressed Plant	` '	
Inundation Visible on A		(B7)						c Position (D2)	
X Water-Stained Leaves (Б9)						Shallow Aq		D.4\	
Aquatic Fauna (B13)							X FAC-Neutra	raphic Relief (J4)	
							X TAO-Neutra	1 1631 (D3)		
Field Observations:										
Surface Water Present?	Yes	No	X Depth (inch	nes):						
Water Table Present?	Yes	No	X Depth (inch	nes):						
Saturation Present?	Yes	No	X Depth (inch	nes):		Wetland Hyd	Irology Present?	Yes	Χ	No
(includes capillary fringe)										<u> </u>
Describe Recorded Data (str	eam gauge, n	nonitoring w	ell, aerial photos,	previous ins	spections), if a	vailable:				
Remarks:										
i										

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W008-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 90 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 0 FACU species x 4 = UPL species 10 x 5 = 100 230 Column Totals: (A) Prevalence Index = B/A = 2.3 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 _ = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass FACW 2. Juncus effusus / Common bog rush, Soft or lamp rush 10 No FACW ¹Indicators of hydric soil and wetland hydrology must 3. Eleocharis / Spikerush NI be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W008-1W</u>

	iption: (Describe to the	he depth nee			or confirm	the absen	ce of indicator	rs.)		
Depth (inches)	Matrix Color (moist)	%		Features %	Tuno1	Loc²	Toyturo		Domorko	
(inches)			Color (moist)		Type ¹		Clay Learn	Diaturbad	Remarks	•
0-6	5Y 5/1	95	10YR 5/8	5	<u> </u>	M	Clay Loam	Disturbed	capped coal min	е
		· —— -								
		· —— -								
		· —— -								
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	ation: PL=Po	ore Lining, M=Ma	trix.
Hydric Soil I	ndicators:						Indicators	for Proble	ematic Hydric So	nile³·
Histosol			Dark Surfac	ce (S7)					(10) (MLRA 147)	
	ipedon (A2)			Below Surfac	e (S8) (MI	RΔ 147 1			Redox (A16)	
Black His				Surface (S9)	. , .			MLRA 14		
_	n Sulfide (A4)			yed Matrix (F		1, 140)	Pi	•	odplain Soils (F1	9)
	Layers (A5)		X Depleted M		-,			MLRA 13		~,
	ck (A10) (LRR N)			Surface (F6	3)		\/a	-	Dark Surface (Ti	=12)
	Below Dark Surface (Δ11)		ark Surface				-	n in Remarks)	,
	rk Surface (A12)	, (11)		ressions (F8			<u> </u>	uioi (Explai	ir iir remarks)	
	ucky Mineral (S1)			nese Masse						
	MLRA 147,148)		(LRR N, MI		3 (1 12)					
	leyed Matrix (S4)			face (F13) (MI RA 136	122)	3Indica	tors of hydr	ophytic vegetatio	n and
	edox (S5)			loodplain Sc		-			ology must be pre	
	Matrix (S6)			Material (F2					oed or problemati	
	Wallix (GG)			iviatoriai (i z	(III LIO	, ,		nooc diotark	ou or problemati	
Restrictive L	ayer (if observed):									
Type:										
Depth (inc	ches):						Hydric Soil P	resent?	Yes X	No
Remarks:	in rocky refusal									
`	o in rooky relasai									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry	County	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renew	ables, LLC	Sta	te: Kentucky	Sampling Point:	05-W009-1U
Investigator(s):	CM, RMS, JK	Section, Towr	nship, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	c): Hillslope	Local relief (c	oncave, convex, none):	convex	Slope	e (%): 30
Subregion (LRR or MLRA):	LRR N	Lat: 37.2815	2317 Long:	-83.2988596	7 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to	70 percent slopes, be	enched, stony	NWI classification	n:	
	ons on the site typical for this time of			explain in Remark	s.)	
	- · ·	nificantly disturbed?		umstances" prese	,	X No
	, or Hydrologynat			in any answers in		
	S - Attach site map showin		,	· ·	•	
Hydrophytic Vegetation Prese	•	х	,	p		
Hydric Soil Present?	Yes No		the Sampled Area			
1 · ·			=	Voo	No. V	
Wetland Hydrology Present?	Yes No	wi	thin a Wetland?	Yes	No X	
Remarks: land recent capp	ped mine disturbed soil					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
1	of one required: check all that apply)		Secondary Indica	tors (minimum of	two required)
Surface Water (A1)		Aquatic Plants (B14)			Cracks (B6)	o roquirou)
High Water Table (A2)		gen Sulfide Odor (C1)			getated Concave S	Surface (B8)
Saturation (A3)		zed Rhizospheres on L			itterns (B10)	241.400 (20)
Water Marks (B1)		nce of Reduced Iron (- , ,	Moss Trim L	, ,	
Sediment Deposits (B2)		nt Iron Reduction in Til			Water Table (C2)	
Drift Deposits (B3)		Muck Surface (C7)	.04 000 (00)	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		(Explain in Remarks)			isible on Aerial Im	agery (C9)
Iron Deposits (B5)		(Explain in Homano)			tressed Plants (D	, ,
Inundation Visible on Ae	erial Imagery (R7)				Position (D2)	',
Water-Stained Leaves (F	• • • •			Shallow Aqu	, ,	
Aquatic Fauna (B13)	30)				aphic Relief (D4)	
				FAC-Neutra		
Field Observations:						
Surface Water Present?	Yes NoX Dep	th (inches):				
Water Table Present?	Yes NoX Dep	th (inches):				
Saturation Present?	Yes No _X Dep	th (inches):	Wetland Hydr	ology Present?	Yes	No X
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial p	hotos, previous inspec	tions), if available:			
_						
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W009-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = ___ Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species FACU species 80 x 4 = UPL species 20 x 5 = 100 420 Column Totals: 100 (A) Prevalence Index = B/A = 4.2**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Poa pratensis / Kentucky blue grass FACU 2. Trifolium pratense / Red clover 20 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 10 No NI be present, unless disturbed or problematic. 4. Rubus / Blackberry 5 No NI 5. Plantago lanceolata / Ribwort, English plantain UPL **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W009-1U

Profile Desc Depth	ription: (Describe to tl Matrix	ne aeptn nee		e indicator Features	or contirm	tne absen	ce ot indicator	rs.)			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remarks	5	
0-6	10YR 4/3	70	10YR 5/6	30	C	M	Silt Loam	Heavily di	sturbed soils		, rocky r
		<u> </u>			<u> </u>						
		<u> </u>		<u> </u>	<u> </u>						
Type: C=Cor	ncentration, D=Depletio	n, RM=Redu	ced Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	ation: PL=P	ore Lining, M=	-Matrix.	
Black Hi Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M (LRR N, Sandy G Sandy R	(A1) pipedon (A2)	A11)	Thin Dark S Loamy Gle Depleted M Redox Darl Depleted D Redox Dep Iron-Manga (LRR N, Mi Umbric Sur	Below Surface Surface (S9) yed Matrix (F3) Surface (F6 ark Surface ressions (F8 inese Masse	(MLRA 14 6) (F7)) s (F12) (MLRA 136 bils (F19) (N	, 122) ILRA 148)	2 2 48) 2 C 2 C 2 C 2 C 2 C 2 Indica	cm Muck (A oast Prairie (MLRA 14 iedmont Flo (MLRA 13 ery Shallow other (Explain ators of hydretland hydretland	odplain Soils	(F19) (TF12)) ation and	
Restrictive L Type: Depth (in	ayer (if observed):		_				Hydric Soil F	Present?	Yes	No	X
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	05-W009-1W
Investigator(s):	CM, RMS, JK	Section, Township,	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	e): Bowl shaped depression	Local relief (concav		concave	e Slope	e (%): 2-5
Subregion (LRR or MLRA):		- 37.281616	Long:	-83.298977		
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe			NWI classification		
· · · · · · · · · · · · · · · · · · ·	ons on the site typical for this time of year?			kplain in Remark		
	••	tly disturbed?	Are "Normal Circu	•	,	X No
	, or Hydrology naturally	-	(If needed, explain	•		<u> </u>
			,	-	•	
SUMMART OF FINDING	S - Attach site map showing sar	nping point loca	mons, transects	s, important	ieatures, etc.	
Hydrophytic Vegetation Prese		_				
Hydric Soil Present?	Yes X No	Is the Sa	ampled Area			
Wetland Hydrology Present?		within a	Wetland?	Yes X	No	<u>_</u>
Remarks: Reclaimed coal	mine					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
1	of one required: check all that apply)		5	Secondary Indica	ators (minimum of	two required)
Surface Water (A1)		c Plants (B14)			Cracks (B6)	
High Water Table (A2)		ulfide Odor (C1)	-		getated Concave	Surface (B8)
Saturation (A3)		nizospheres on Living F	Roots (C3)		atterns (B10)	(= 1)
Water Marks (B1)		Reduced Iron (C4)	_	Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled So	ils (C6)		Water Table (C2)	
Drift Deposits (B3)	Thin Muck S		(00)	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		ain in Remarks)	-		isible on Aerial Im	nagery (C9)
Iron Deposits (B5)		mi mi rtomanto,	-		Stressed Plants (D	, ,
Inundation Visible on Ae	erial Imagery (R7)		-		Position (D2)	',
Water-Stained Leaves (F	5 , ,		-	Shallow Aqu		
Aquatic Fauna (B13)	33)		-		aphic Relief (D4)	
Aquatic Fauria (B13)			-	FAC-Neutra		
			-	1710 110111	1 1631 (150)	
Field Observations:						
Surface Water Present?	Yes No X Depth (incl	nes):				
Water Table Present?	Yes X No Depth (incl	hes): 6	'			
Saturation Present?	Yes No X Depth (incl	nes):	Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)			•			
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections),	if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W009-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 60 x 2 = Sapling/Shrub Stratum (Plot size: 15 10 _ x 3 = FAC species 20 FACU species x 4 = UPL species 5 x 5 = Column Totals: (A) Prevalence Index = B/A = 2.68 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass FACW 2. Poa pratensis / Kentucky blue grass 20 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Rumex crispus / Curly dock 10 FAC be present, unless disturbed or problematic. 4. Aster / Aster 5 **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 19 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W009-1W</u>

Profile Descri	ption: (Describe to the	e depth needed	to document th	e indicator o	r confirm	the absen	ce of indicator	·s.)	
Depth	Matrix			Features					
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0-8	2.5Y 4/1	95	10YR 5/8	5	С	M,PL	Clay Loam	Gravel	
¹Type: C=Cond	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ked Sand Gra	ins.		²Loca	ation: PL=Po	ore Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators	s for Proble	ematic Hydric Soils³:
Histosol (Dark Surface	ce (S7)					.10) (MLRA 147)
	pedon (A2)			Below Surface	e (S8) (M	LRA 147, 14		•	Redox (A16)
Black His				Surface (S9)				(MLRA 14	
	Sulfide (A4)			yed Matrix (F:		,,	Pi	•	odplain Soils (F19)
	Layers (A5)		X Depleted M		,		<u> </u>	(MLRA 13	
	k (A10) (LRR N)			k Surface (F6	`		V	•	Dark Surface (TF12)
	Below Dark Surface (A	11)		ark Surface (n in Remarks)
	•	11)		ressions (F8)				tilei (Explaii	i iii iveiliaiks)
	k Surface (A12)								
	icky Mineral (S1)			anese Masses	S (F 12)				
•	/ILRA 147,148)		(LRR N, MI		W DA 404	. 400\	311!	4 ll	
	eyed Matrix (S4)			face (F13) (I					ophytic vegetation and
Sandy Re				loodplain Soi					ology must be present.
Stripped I	Matrix (S6)		Red Parent	t Material (F2	1) (MLR	A 127, 147)	ur	nless disturb	oed or problematic.
Restrictive I a	yer (if observed):								
	yer (ii observeu).								
Type: Depth (inc	200):		=				Hydric Soil P	rocont?	Voc. V. No.
Deptil (ilic	les).		=				Hyuric 30ii F	resentr	Yes X No
Remarks:									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	04/12/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	05-W009-1W
Investigator(s):	CM, RMS, JK	Section, Township,	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	e): Bowl shaped depression	Local relief (concav		concave	e Slope	e (%): 2-5
Subregion (LRR or MLRA):		- 37.281616	Long:	-83.298977		
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe			NWI classification		
· · · · · · · · · · · · · · · · · · ·	ons on the site typical for this time of year?			kplain in Remark		
	••	tly disturbed?	Are "Normal Circu	•	,	X No
	, or Hydrology naturally	-	(If needed, explain	•		<u> </u>
			,	-	•	
SUMMART OF FINDING	S - Attach site map showing sar	nping point loca	mons, transects	s, important	ieatures, etc.	
Hydrophytic Vegetation Prese		_				
Hydric Soil Present?	Yes X No	Is the Sa	ampled Area			
Wetland Hydrology Present?		within a	Wetland?	Yes X	No	<u>_</u>
Remarks: Reclaimed coal	mine					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
1	of one required: check all that apply)		5	Secondary Indica	ators (minimum of	two required)
Surface Water (A1)		c Plants (B14)			Cracks (B6)	
High Water Table (A2)		ulfide Odor (C1)	-		getated Concave	Surface (B8)
Saturation (A3)		nizospheres on Living F	Roots (C3)		atterns (B10)	(= 1)
Water Marks (B1)		Reduced Iron (C4)	_	Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled So	ils (C6)		Water Table (C2)	
Drift Deposits (B3)	Thin Muck S		(00)	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		ain in Remarks)	-		isible on Aerial Im	nagery (C9)
Iron Deposits (B5)		mi mi rtomanto,	-		Stressed Plants (D	, ,
Inundation Visible on Ae	erial Imagery (R7)		-		Position (D2)	',
Water-Stained Leaves (F	5 , ,		-	Shallow Aqu		
Aquatic Fauna (B13)	33)		-		aphic Relief (D4)	
Aquatic Fauria (B13)			-	FAC-Neutra		
			-	1710 110111	1 1631 (150)	
Field Observations:						
Surface Water Present?	Yes No X Depth (incl	nes):				
Water Table Present?	Yes X No Depth (incl	hes): 6	'			
Saturation Present?	Yes No X Depth (incl	nes):	Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)			•			
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections),	if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W009-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 60 x 2 = Sapling/Shrub Stratum (Plot size: 15 10 _ x 3 = FAC species 20 FACU species x 4 = UPL species 5 x 5 = Column Totals: (A) Prevalence Index = B/A = 2.68 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass FACW 2. Poa pratensis / Kentucky blue grass 20 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Rumex crispus / Curly dock 10 FAC be present, unless disturbed or problematic. 4. Aster / Aster 5 **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 19 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W009-1W</u>

Profile Descri	ption: (Describe to the	e depth needed	to document th	e indicator o	r confirm	the absen	ce of indicator	·s.)	
Depth	Matrix			Features					
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0-8	2.5Y 4/1	95	10YR 5/8	5	С	M,PL	Clay Loam	Gravel	
¹Type: C=Cond	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ked Sand Gra	ins.		²Loca	ation: PL=Po	ore Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators	s for Proble	ematic Hydric Soils³:
Histosol (Dark Surface	ce (S7)					.10) (MLRA 147)
	pedon (A2)			Below Surface	e (S8) (M	LRA 147, 14		•	Redox (A16)
Black His				Surface (S9)				(MLRA 14	
	Sulfide (A4)			yed Matrix (F:		,,	Pi	•	odplain Soils (F19)
	Layers (A5)		X Depleted M		,		<u> </u>	(MLRA 13	
	k (A10) (LRR N)			k Surface (F6	`		V	•	Dark Surface (TF12)
	Below Dark Surface (A	11)		ark Surface (n in Remarks)
	•	11)		ressions (F8)				tilei (Explaii	i iii iveiliaiks)
	k Surface (A12)								
	icky Mineral (S1)			anese Masses	S (F 12)				
•	/ILRA 147,148)		(LRR N, MI		W DA 404	. 400\	311!	4 - 6 ll	
	eyed Matrix (S4)			face (F13) (I					ophytic vegetation and
Sandy Re				loodplain Soi					ology must be present.
Stripped I	Matrix (S6)		Red Parent	t Material (F2	1) (MLR	A 127, 147)	ur	nless disturb	oed or problematic.
Restrictive I a	yer (if observed):								
	yer (ii observeu).								
Type: Depth (inc	200):		=				Hydric Soil P	rocont?	Voc. V. No.
Deptil (ilic	les).		=				Hyuric 30ii P	resent	Yes X No
Remarks:									

Project/Site:	Bright Mou	ntain Solar		City/Co	ounty:	Hazard, Perry	y County	Sampling Date:	04/13/2022
Applicant/Owner:			rid Renewa			-	tate: Kentucky	Sampling Point:	05-W010-1U
Investigator(s):		JK		Section	n, Township, Ra	nge:	Cit	ty of Hazard	
Landform (hillslope, terrace, e	etc):	Hillslo	ре		relief (concave,		conve	x Slop	e (%): 45
Subregion (LRR or MLRA):		LRR N	L	at: 3	37.28720475	Long:	-83.294860	06 Datu	ım: WGS 84
Soil Map Unit Name:	Fairpoint a	and Bethesda	soils, 2 to	70 percent slo	pes, benched, s	tony	NWI classification	on:	1
Are climatic / hydrologic cond	itions on the sit	te typical for t	his time of	ear? Yes	X No	(If no	, explain in Remark	(s.)	
Are Vegetation, So	il, or	Hydrology _	sign	ficantly disturb	bed?	Are "Normal Ci	rcumstances" prese	ent? Yes	X No
Are Vegetation, So	il, or	Hydrology	natu	rally problema	atic?	(If needed, exp	lain any answers in	Remarks.)	
SUMMARY OF FINDIN	GS - Attach	site map	showing	sampling	point location	ons, transe	cts, important	features, etc.	
Hydrophytic Vegetation Pre	sent?	Yes	No No	Х			-		
Hydric Soil Present?		Yes	No -	X	Is the Sam	oled Area			
Wetland Hydrology Present	t?	Yes	No -		within a We		Yes	No X	
Remarks:									
HYDROLOGY									
Wetland Hydrology Indica	ators:								
Primary Indicators (minimum		red: check all	that apply)				Secondary Indica	ators (minimum of	two required)
Surface Water (A1)				quatic Plants (B14)	-		l Cracks (B6)	
High Water Table (A2)		-		en Sulfide Od	,			egetated Concave	Surface (B8)
Saturation (A3)		-			es on Living Roo	ots (C3)		atterns (B10)	
Water Marks (B1)		_	Presen	ce of Reduced	d Iron (C4)		Moss Trim I	Lines (B16)	
Sediment Deposits (B2	2)	-	Recent	Iron Reductio	on in Tilled Soils	(C6)	Dry-Season	Water Table (C2))
Drift Deposits (B3)			Thin M	uck Surface (C	C7)		Crayfish Bu		
Algal Mat or Crust (B4)	-	Other (Explain in Ren	marks)			/isible on Aerial In	
Iron Deposits (B5)								Stressed Plants (D	01)
Inundation Visible on A		(B7)						c Position (D2)	
Water-Stained Leaves	(B9)						Shallow Aq	, ,	
Aquatic Fauna (B13)								raphic Relief (D4)	
							FAC-Neutra	al Test (D5)	
Field Observations:									
Surface Water Present?	Yes	No 2	X Depth	(inches):					
Water Table Present?	Yes	No 2	X Depth	(inches):					
Saturation Present?	Yes	No 2	X Depth	(inches):		Wetland Hyd	drology Present?	Yes	No X
(includes capillary fringe)									- —
Describe Recorded Data (s	tream gauge, r	monitoring we	ell, aerial ph	otos, previous	inspections), if a	available:			
Remarks:									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W010-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 85 FACU species x 4 = UPL species 10 x 5 = 95 390 Column Totals: (A) Prevalence Index = B/A = 4.11 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem 2. Plantago lanceolata / Ribwort, English plantain 10 ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 95 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 19 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W010-1U

	ption: (Describe to the	e depth needed			or confirm	the abser	nce of indicators	s.)			
Depth	Matrix			Features							
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks		
0-18	10YR 4/3	85	10YR 4/6	15	<u> </u>	M	Slty Clay Loam	Very grave	ely		
¹Type: C=Cond	centration, D=Depletion	, RM=Reduced I	Matrix, MS=Mask	ed Sand Gra	ins.		²Loca	tion: PL=Pc	ore Lining, M=N	Matrix.	
Hydric Soil Inc	dicators:						Indicators	for Proble	matic Hydric	Soils³:	
Histosol (A1)		Dark Surfac	e (S7)			2 0	cm Muck (A	10) (MLRA 1 4	17)	
Histic Epi	pedon (A2)		Polyvalue B	elow Surface	e (S8) (ML	RA 147, 1	48) Co	ast Prairie	Redox (A16)		
Black Hist	tic (A3)			urface (S9)				(MLRA 14	7, 148)		
	Sulfide (A4)			ed Matrix (F		•	Pie	•	odplain Soils (F	F19)	
	Layers (A5)		Depleted M		-		_	(MLRA 13		•	
	k (A10) (LRR N)			Surface (F6)		Ve	ry Shallow	Dark Surface ((TF12)	
	Below Dark Surface (A	11)		ark Surface (_		n in Remarks)	,	
	k Surface (A12)	,		essions (F8)			_	` '	,		
_	icky Mineral (S1)			nese Masses							
	/ILRA 147,148)		(LRR N, ML		,						
•	eyed Matrix (S4)		•	ace (F13) (I	MLRA 136	. 122)	³Indicat	ors of hydro	ophytic vegetat	tion and	
Sandy Re	- , ,			loodplain Soi				-	logy must be p		
	Matrix (S6)			Material (F2					ed or problem		
			_			, ,	-				
Restrictive La	yer (if observed):										
Type:			_								
Depth (incl	nes):		_				Hydric Soil P	resent?	Yes	No	X
Remarks:											
	oils Have been disturbe	ed due to mining	activity.								
		· ·	•								

Project/Site:	Bright Mo	ountair	Solar		City/Cou	ıntv:	Hazard, Perry	County	Sampling Da	ıte:	04/13/2022
Applicant/Owner:				rid Renewables.	-			ate: Kentucky	Sampling Po		05-W010-1W
Investigator(s):		JK		,	Section,	Township, R			ty of Hazard		
Landform (hillslope, terrace, etc	c):		Swale	9	- '		convex, none):	concav	•	Slope (%	%): 3-8
Subregion (LRR or MLRA):		LRR	N	Lat:	-	.28712213		-83.294813		Datum:	WGS 84
Soil Map Unit Name:	Fairpoir	nt and I	Bethesda	soils, 2 to 70 pe				NWI classificati			
Are climatic / hydrologic conditi								– , explain in Remarl	ks.)		
Are Vegetation , Soil				-				cumstances" pres	,	Х	No
							(If needed, expl	ain any answers ir	Remarks.)		
SUMMARY OF FINDING							,	-	•	tc.	
Hydrophytic Vegetation Pres			es X		- P 3 P		,		,		
Hydric Soil Present?	entr		es X		_	le the Sar	npled Area				
Wetland Hydrology Present?			es X		_	within a V	•	Yes X	No		
Welland Trydrology Fresent:		'				within a v	retianu:	163 <u>X</u>			
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicat											
Primary Indicators (minimum	of one req	uired:	check all					Secondary Indic	•	n of two	o required)
X Surface Water (A1)			-	True Aquatio					il Cracks (B6)	_	
High Water Table (A2)			-	Hydrogen Si			. (00)		egetated Conc	ave Su	rface (B8)
Saturation (A3)			-	X Oxidized Rh	•	•	oots (C3)		atterns (B10)		
Water Marks (B1)			-	Presence of		, ,	(00)		Lines (B16)	(00)	
Sediment Deposits (B2))		-			in Tilled Soil	s (C6)		n Water Table	(C2)	
Drift Deposits (B3)			-	Thin Muck S				Crayfish Bu	, ,		(CO)
Algal Mat or Crust (B4)			-	Other (Expla	ın ın Rema	arks)			Visible on Aeri	•	ery (C9)
Iron Deposits (B5)		(D7)							Stressed Plant	` '	
Inundation Visible on A	_	ry (B7)							c Position (D2)	,	
Water-Stained Leaves (вэ)							Shallow Aq		D4\	
Aquatic Fauna (B13)								X FAC-Neutra	raphic Relief (I	J4)	
								X TAO-Neutra	1 1631 (D3)		
Field Observations:											
Surface Water Present?	Yes	Χ	No	Depth (inch	nes):	1					
Water Table Present?	Yes		No 2	X Depth (inch	nes):						
Saturation Present?	Yes		No 2	X Depth (inch	nes):		Wetland Hyd	Irology Present?	Yes	Χ	No
(includes capillary fringe)	•										
Describe Recorded Data (str	eam gauge	e, moni	toring we	ell, aerial photos,	previous ir	nspections), i	available:				
Remarks:											
- Tomano											
i											

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W010-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 80 x 1 = 50% of total cover: 20% of total cover: FACW species 5 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: 85 (A) Prevalence Index = B/A = 1.06 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai 2. Eleocharis palustris / Common spikerush 20 Yes OBL ¹Indicators of hydric soil and wetland hydrology must 3. Scirpus cyperinus / Woolgrass **FACW** be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 42 20% of total cover: 17 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W010-1W</u>

		ne depth nee	eded to document th		or confirm	the absen	ce of indicator	s.)		
Depth	Matrix			Features			_		_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-4	10YR 4/2	95	7.5YR 5/8	5	<u> </u>	M,PL	Clay Loam			
4-18	10YR 4/1	95	10YR 5/6	5	С	M	Clay Loam	Very stony		
¹Type: C=Con	centration, D=Depletion	n, RM=Redu	ced Matrix, MS=Mask	ked Sand Gr	ains.		²Loca	tion: PL=Pore	Lining, M=Matrix	ζ.
Hydric Soil Ir	ndicators:						Indicators	for Problema	atic Hydric Soils	s³:
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A10)	(MLRA 147)	
Histic Ep	ipedon (A2)		Polyvalue E	Below Surfac	e (S8) (M	LRA 147, 1	48) Co	oast Prairie Re	dox (A16)	
Black His				Surface (S9)			<i>'</i> —	(MLRA 147,		
_	n Sulfide (A4)			yed Matrix (F		, -,	Pi	•	olain Soils (F19)	
	Layers (A5)		X Depleted M		,		<u> </u>	(MLRA 136, 1		
	ck (A10) (LRR N)			k Surface (F	3)		\/a	•	rk Surface (TF1:	2)
	Below Dark Surface (A	Δ11\		ark Surface				ther (Explain in	•	-/
	rk Surface (A12)	~!! <i>)</i>		ressions (F8				iner (Explain in	rtemarks)	
_	lucky Mineral (S1)			anese Masse						
	MLRA 147,148)		(LRR N, M		S (F12)					
•	•			•	MI DA 424	400\	31		. 4: 4-4:	
	leyed Matrix (S4)			face (F13)					ytic vegetation a	
	edox (S5)			Floodplain So					y must be prese	ent.
Stripped	Matrix (S6)		Red Paren	t Material (F2	21) (MLR	A 127, 147)	ur	iless disturbed	or problematic.	
Restrictive L	aver (if observed):									
	ayer (ii observeu).									
Type:	ayer (ii observed).									
Type:							Hydric Soil P	resent?	Yes X I	No
Type:			_				Hydric Soil P	resent?	Yes <u>X</u> I	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:			_				Hydric Soil P	resent?	Yes X I	No
Type:							Hydric Soil P	resent?	Yes <u>X</u> I	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X I	No
Type:							Hydric Soil P	resent?	Yes X I	No
Type:							Hydric Soil P	resent?	Yes X I	No
Type:							Hydric Soil P	resent?	Yes X I	No
Type:							Hydric Soil P	resent?	Yes <u>X</u> I	No
Type:							Hydric Soil P	resent?	Yes <u>X</u> I	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No
Type: Depth (inc							Hydric Soil P	resent?	Yes X	No
Type: Depth (inc							Hydric Soil P	resent?	Yes X	No
Type: Depth (inc							Hydric Soil P	resent?	Yes X	No
Type:							Hydric Soil P	resent?	Yes X	No

Project/Site:	Bright Mountain Solar	City/County	: Hazard, Perry	County	Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid Renew	ables, LLC	Sta	ate: Kentucky	Sampling Point:	05-W011-1U
Investigator(s):	JK	Section, Tov	wnship, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Hillslope	Local relief	(concave, convex, none):	convex	Slope	e (%): 0-3
Subregion (LRR or MLRA):	LRR N	Lat: 37.29	14559 Long:	-83.292222	38 Datur	n: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to			NWI classification		
	ons on the site typical for this time of			explain in Remark	s)	
Are Vegetation , Soil		nificantly disturbed?		cumstances" prese	,	X No
	, or Hydrologyna			ain any answers in		<u> </u>
	S - Attach site map showin			-	•	
Hydrophytic Vegetation Prese	ent? Yes No	Х		-		
Hydric Soil Present?	Yes No		s the Sampled Area			
Wetland Hydrology Present?	Yes No		vithin a Wetland?	Yes	No X	
	163 110		vicinii a weciana:	163	X	_
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
1	of one required: check all that apply)		Secondary Indica	ators (minimum of	two required)
Surface Water (A1)		Aquatic Plants (B14)			Cracks (B6)	1 7
High Water Table (A2)		ogen Sulfide Odor (C			getated Concave s	Surface (B8)
Saturation (A3)		zed Rhizospheres on	,		atterns (B10)	(= -)
Water Marks (B1)		ence of Reduced Iron	- ' '	Moss Trim L		
Sediment Deposits (B2)		nt Iron Reduction in T			Water Table (C2)	
Drift Deposits (B3)		Muck Surface (C7)	miled Colle (Co)	Crayfish Bu	` ,	
Algal Mat or Crust (B4)		(Explain in Remarks	1		isible on Aerial Im	ageny (CQ)
Iron Deposits (B5)		(Explain in Remarks	')		Stressed Plants (D	
Inundation Visible on Ae	rial Imageny (R7)				Position (D2)	')
Water-Stained Leaves (E	• • • •			Shallow Aqu	, ,	
Aquatic Fauna (B13)	59)				aphic Relief (D4)	
Aquatic Faulia (B13)						
				FAC-Neutra	riest (D5)	
Field Observations:						
Surface Water Present?	Yes No X Dep	th (inches):				
Water Table Present?		th (inches):				
Saturation Present?		th (inches):	Wetland Hyd	rology Present?	Yes	No X
(includes capillary fringe)	165 146 <u>X</u> Bep	ur (mones).		lology i resent.		<u> </u>
Describe Recorded Data (stre	eam gauge, monitoring well, aerial p	hotos, previous inspe	ections), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W011-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 75 FACU species x 4 = UPL species 10 x 5 = 85 Column Totals: (A) Prevalence Index = B/A = 4.12 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Trifolium pratense / Red clover **FACU** 2. Lotus corniculatus / Bird's foot trefoil, Bird's-foot trefoil 20 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Andropogon virginicus / Broomsedge bluestem 15 No FACU be present, unless disturbed or problematic. 4. Aster / Aster 10 **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 42 20% of total cover: 17 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W011-1U

Depth	Matrix			Features	or commi	the absent	ce of indicator	3.,			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remark	s	
0-3	10YR 4/2	100	Color (molety		.,,,,,		Silt Loam	Very grav			
	-					 .		·			
ype: C=Con	centration, D=Depletio	n, RM=Redu	ced Matrix, MS=Masl	ked Sand Gr	ains.		²Loca	ation: PL=P	ore Lining, M	=Matrix.	
ydric Soil Ir	ndicators:						Indicator	s for Proble	ematic Hydri	c Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A	A10) (MLRA	147)	
Histic Ep	ipedon (A2)			Below Surfac			18) C	oast Prairie	Redox (A16))	
Black His	stic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 14			
Hydroge	n Sulfide (A4)			yed Matrix (F	2)		P	iedmont Flo	odplain Soils	(F19)	
	Layers (A5)		Depleted M					(MLRA 1			
	ck (A10) (LRR N)			k Surface (F			_	-	Dark Surface		
	Below Dark Surface (A	411)		ark Surface			<u> </u>	ther (Explai	in in Remarks	s)	
_	rk Surface (A12)			ressions (F8							
_ ′	ucky Mineral (S1)			anese Masse	s (F12)						
	MLRA 147,148)		(LRR N, M		MI DA 126	122\	3lpdiog	toro of buden	anhutia vaas	tation and	
	leyed Matrix (S4) edox (S5)			face (F13) (Floodplain Sc		-			ophytic vege ology must be		
	Matrix (S6)			t Material (F2					bed or proble		
_ Guipped	Watrix (00)		red r aren	t Material (1 2	(MEIX	121, 141)		niess distan	bed of proble	matio.	
	ayer (if observed):										
Type:									.,		.,
Depth (inc	cnes):						Hydric Soil F	resent?	Yes	No	Х
	Soils Have been disturb										
	Soils Have been disturt Rock refusal 3 inch, Mu										
9											
9											
9											
9											
9											
9											
5											
5											
9											
5											
5											
5											
5											
5											
5											
9											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	unty	Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid Renewa	ables, LLC	State	: Kentucky	Sampling Point:	05-W011-1W
Investigator(s):	JK	Section, Townshi	p, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	:): Swale		ave, convex, none):	concave	e Slope	e (%): 3-8
Subregion (LRR or MLRA):		 Lat: 37.2914528		-83.2922319		
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to			NWI classification	-	
	ons on the site typical for this time of			plain in Remark		
· -	= · ·	nificantly disturbed?	Are "Normal Circun	•	,	X No
	, or Hydrologynati		(If needed, explain	•		<u> </u>
· · · · · · · · · · · · · · · · · · ·	S - Attach site map showing		,	=	·	
SUMMART OF FINDING	5 - Attach site map snowing	g sampling point lo	cations, transects	, important i	ieatures, etc.	
Hydrophytic Vegetation Prese						
Hydric Soil Present?	Yes X No	ls the	Sampled Area			
Wetland Hydrology Present?			a Wetland?	Yes X	No	_
Remarks:		-				
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
	of one required: check all that apply)		S	Secondary Indica	ators (minimum of	two required)
X Surface Water (A1)		quatic Plants (B14)	<u>-</u>		Cracks (B6)	
High Water Table (A2)		gen Sulfide Odor (C1)	_	_	getated Concave	Surface (B8)
Saturation (A3)		ed Rhizospheres on Livin	a Roots (C3)		atterns (B10)	,
Water Marks (B1)		nce of Reduced Iron (C4)	_	Moss Trim L	, ,	
Sediment Deposits (B2)		t Iron Reduction in Tilled	Soils (C6)	_	Water Table (C2)	
Drift Deposits (B3)		luck Surface (C7)		Crayfish Bur	, ,	
Algal Mat or Crust (B4)		(Explain in Remarks)	-		isible on Aerial Im	agery (C9)
Iron Deposits (B5)		(======================================	-	_	Stressed Plants (D	
Inundation Visible on Ae	rial Imagery (B7)		_	_	Position (D2)	• /
Water-Stained Leaves (E	· ,		_	Shallow Aqu	, ,	
Aquatic Fauna (B13)	70,		_		aphic Relief (D4)	
			-	X FAC-Neutral		
			_			
Field Observations:						
Surface Water Present?	Yes X No Dept	h (inches): 1				
Water Table Present?	Yes No X Dept	h (inches):				
Saturation Present?	Yes No X Dept	h (inches):	Wetland Hydrol	ogy Present?	Yes X	No
(includes capillary fringe)						· · · · · · · · · · · · · · · · · · ·
Describe Recorded Data (stre	eam gauge, monitoring well, aerial ph	notos, previous inspection	s), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W011-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 60 x 1 = 50% of total cover: 20% of total cover: FACW species 20 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 5 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.41 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai OBL 20 Yes **FACW** 2. Scirpus cyperinus / Woolgrass ¹Indicators of hydric soil and wetland hydrology must 3. Trifolium pratense / Red clover FACU be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 42 20% of total cover: 17 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W011-1W</u>

Profile Descri	ption: (Describe to the	e depth needed	to document th	e indicator o	r confirm	the absen	ce of indicator	rs.)		
Depth	Matrix			Features						
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-6	10YR 4/2	90	7.5YR 5/8	10	С	M,PL	Clay Loam			
¹Type: C=Cond	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ed Sand Gra	ins.		²Loca	ation: PL=Pore L	ining, M=Matrix.	
Hydric Soil In	dicators:						Indicators	s for Problemat	tic Hydric Soils³:	
Histosol (A1)		Dark Surfac	ce (S7)			2	cm Muck (A10)	(MLRA 147)	
Histic Epi	pedon (A2)		Polyvalue E	Below Surface	e (S8) (M	LRA 147, 1	48) Co	oast Prairie Red	lox (A16)	
Black His			Thin Dark S	Surface (S9)	(MLRA 1	47, 148)		(MLRA 147, 1	48)	
	Sulfide (A4)		_	ed Matrix (F		•	Pi	iedmont Floodpl	•	
	Layers (A5)		X Depleted M	•	,			(MLRA 136, 1		
	k (A10) (LRR N)			Surface (F6)		Ve	•	k Surface (TF12)	
	Below Dark Surface (A	11)		ark Surface (ther (Explain in		
	k Surface (A12)	,		ressions (F8)			_		, , , , , , , , , , , , , , , , , , , ,	
	icky Mineral (S1)			nese Masses						
	/ILRA 147,148)		(LRR N, ML		, (· · <u>-</u>)					
•	eyed Matrix (S4)		•	face (F13) (I	WI RA 136	5 122)	3Indica	tors of hydrophy	tic vegetation and	
Sandy Re	- , ,			loodplain Soi					must be present.	
	Matrix (S6)			Material (F2				nless disturbed o		
Suipped i	wattix (50)		Red Falent	Material (1 2	1) (IVILIX	H 121, 141)	ui	iless disturbed (or problematic.	
Restrictive La	yer (if observed):									
Type:										
Depth (inc	nes):		_				Hydric Soil P	resent? Y	'es X No	
. ,	, <u> </u>		•							
Remarks:										
R	ock refusal 10 inches									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	05-W012-1W
Investigator(s):	JK	Section, Township,	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Swale	Local relief (concav		concave	e Slope	e (%): 3-8
Subregion (LRR or MLRA):	LRR N Lat:	37.29243317	Long:	-83.2932297		, ,
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe			NWI classification		-
	ons on the site typical for this time of year?			xplain in Remark	-	
Are Vegetation , Soil		ntly disturbed?	Are "Normal Circu	•	,	X No
	, or Hydrologynaturally		(If needed, explain	•		<u> </u>
	S - Attach site map showing sa		•	-	*	
	•		ations, transects	s, important	eatures, etc.	
Hydrophytic Vegetation Prese		— I <u> </u>				
Hydric Soil Present?	Yes X No		ampled Area			
Wetland Hydrology Present?	Yes X No	within a	Wetland?	Yes X	No	_
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
	of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)
Surface Water (A1)	True Aquation	c Plants (B14)	ı	Surface Soil	Cracks (B6)	
High Water Table (A2)	Hydrogen S	ulfide Odor (C1)	,	Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	X Oxidized Rh	nizospheres on Living I	Roots (C3)	Drainage Pa	itterns (B10)	
X Water Marks (B1)	Presence of	f Reduced Iron (C4)	ı	Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Recent Iron	Reduction in Tilled Sc	oils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin Muck S	Surface (C7)		Crayfish Bui	rows (C8)	
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)	•	Saturation V	isible on Aerial Im	agery (C9)
Iron Deposits (B5)	_		•	Stunted or S	tressed Plants (D	1)
Inundation Visible on Ae	rial Imagery (B7)		•	Geomorphic	Position (D2)	
Water-Stained Leaves (E	39)		•	Shallow Aqu	itard (D3)	
Aquatic Fauna (B13)			•	Microtopogr	aphic Relief (D4)	
_ ` ` ` ` `				X FAC-Neutra		
Field Observations						
Field Observations:	V 5 11 (1)					
Surface Water Present?	Yes No X Depth (inc	· -	-			
Water Table Present?	Yes NoX Depth (inc		-		., .,	
Saturation Present?	Yes NoX Depth (inc	hes):	_ Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections)	, if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W012-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 20 x 1 = 50% of total cover: 20% of total cover: FACW species 50 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = 0 FAC species 10 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 2.0 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass **FACW** 2. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai 20 OBL Yes ¹Indicators of hydric soil and wetland hydrology must 3. Andropogon virginicus / Broomsedge bluestem 10 FACU be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 40 20% of total cover: 16 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W012-1W</u>

	ription: (Describe to th	ne depth need			or confirm	the abser	nce of indicators	s.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Features %	Type ¹	Loc²	Texture		Remarks	
(inches) 0-6	10YR 4/2	90	7.5YR 5/8	10	C Type	M,PL	Clay Loam		Remarks	
0-0	10114/2	90	7.511 5/6	10		IVI,FL	Clay Loaili			
	·									
¹Type: C=Cor	centration, D=Depletion	n, RM=Reduce	d Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	tion: PL=Pore	Lining, M=Mat	rix.
Hydric Soil I	ndicators:						Indicators	for Problema	tic Hydric So	ils³·
Histosol			Dark Surfac	ce (S7)				cm Muck (A10)	-	
	ipedon (A2)			Below Surfac	e (S8) (M	RΔ 147 1		oast Prairie Re		
Black His				Surface (S9)			0	(MLRA 147, 1		
	n Sulfide (A4)			yed Matrix (F	•	+1, 140)	Di	edmont Floodp	•	2)
	Layers (A5)				2)			MLRA 136, 1)		")
	• , ,				2)		Va	ery Shallow Dai	-	(10)
	ck (A10) (LRR N)	\44\		Surface (F6				-	•	12)
	Below Dark Surface (A	A11)		ark Surface			_ 01	her (Explain in	Remarks)	
	rk Surface (A12)			ressions (F8						
	ucky Mineral (S1)			nese Masse	S (F12)					
	MLRA 147,148)		(LRR N, MI		MI DA 400	400\	311:4		. 4: 4 - 4:	
	leyed Matrix (S4)			face (F13) (ors of hydroph		
_	edox (S5)			loodplain So				etland hydrolog		
Stripped	Matrix (S6)		Red Parent	Material (F2	21) (MLR/	A 127, 147)) un	less disturbed	or problemation	D.
Restrictive L	ayer (if observed):									
Type:	,									
Depth (in	ches):						Hydric Soil P	resent?	Yes X	No
- ` `	,									
Remarks:										
l	Rock refusal 6 inches									

Project/Site:	Bright Mountain Solar	City	y/County:	Hazard, Perry C	ounty	Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid R	enewables, LLC		State	e: Kentucky	Sampling Point:	05-W013-1U
Investigator(s):	RMS, CS, JK	Sed	ction, Township, R	ange:	Cit	of Hazard	
Landform (hillslope, terrace, etc	c): Hillslope	Loc	cal relief (concave,	convex, none):	convex	Slop	e (%): 0-3
Subregion (LRR or MLRA):	LRR N	Lat:	37.291419	Long:	-83.293723	Datu	ım: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils	s. 2 to 70 percent			NWI classification		
Are climatic / hydrologic condition					xplain in Remark		
Are Vegetation , Soil				Are "Normal Circu	•	,	X No
	, or Hydrology			(If needed, explain	•		<u> </u>
SUMMARY OF FINDING				,	· · · · · ·	•	
Hydrophytic Vegetation Prese	•	No X		,	o, iii portaire		
Hydric Soil Present?	Yes	No X	le the San	pled Area			
Wetland Hydrology Present?		No X	within a W	=	Yes	No. V	
Welland Hydrology Fresent?	Yes	NO	within a vi	retianu :		NoX_	
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicate	ors:						
Primary Indicators (minimum	of one required: check all that	apply)			Secondary Indica	tors (minimum of	two required)
Surface Water (A1)	•	True Aquatic Plan	ts (B14)			Cracks (B6)	
High Water Table (A2)		Hydrogen Sulfide	` '	•		getated Concave	Surface (B8)
Saturation (A3)			heres on Living Ro	ots (C3)	Drainage Pa	=	(,
Water Marks (B1)		Presence of Redu	_	()	Moss Trim L	• •	
Sediment Deposits (B2)			ction in Tilled Soils	(C6)		Water Table (C2)	1
Drift Deposits (B3)		Thin Muck Surface		(30)	Crayfish Bur		
Algal Mat or Crust (B4)		Other (Explain in I		•		isible on Aerial In	nagery (C9)
Iron Deposits (B5)	_ `	Julei (Explain in i	(Kemarks)	,		tressed Plants (D	, ,
Inundation Visible on Ae	orial Imagony (R7)			•		Position (D2)	(1)
Water-Stained Leaves (I	3 , , ,			•	Shallow Aqu		
Aquatic Fauna (B13)	(9د			•		aphic Relief (D4)	
Aquatic Faulia (B13)				,			
					FAC-Neutra	Test (D5)	
Field Observations:							
Surface Water Present?	Yes No X	Depth (inches):					
Water Table Present?	Yes No X	Depth (inches):					
Saturation Present?	Yes No X	Depth (inches):		Wetland Hydro	logy Present?	Yes	No X
(includes capillary fringe)							<u> </u>
Describe Recorded Data (stre	eam gauge, monitoring well, ae	rial photos, previo	ous inspections), if	available:			
Damada							
Remarks:							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W013-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species FACU species 80 x 4 = UPL species 20 x 5 = 100 420 Column Totals: 100 (A) Prevalence Index = B/A = 4.2**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 0 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem FACU 20 Yes NI 2. Aster / Aster ¹Indicators of hydric soil and wetland hydrology must 3. Lotus corniculatus / Bird's foot trefoil, Bird's-foot trefoil 10 No FACU be present, unless disturbed or problematic. 4. Trifolium pratense / Red clover 10 FACU **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W013-1U

Profile Descri	ption: (Describe to th	e depth needed			or confirm	the absen	ce of indicator	·s.)			
Depth	Matrix	0/		Features	. .	1 2	T . (5 .		
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks		
0-3	10YR 4/2	100		. ——			Silt Loam	Very grave	elly		
				· ——				-			
				. ——							
				· ——				-			
				· ——				-			
				. ——							
				. ——							
				. ——							
1T O. O	tti D. Dl-ti	- DM Deduced	NA-tric NAC NAI				21	tion DL D		NA - 4-day	
Type: C=Cond	centration, D=Depletion	n, RIVI=Reduced	Matrix, MS=Mask	ed Sand Gra	ains.		LOC	ation: PL=Po	ore Lining, M=	iviatrix.	
Hydric Soil In	dicators:						Indicator	s for Proble	ematic Hydric	: Soils³:	
Histosol (A1)		Dark Surface	ce (S7)			2	cm Muck (A	(10) (MLRA 1	47)	
Histic Epi	pedon (A2)		Polyvalue E	Below Surfac	e (S8) (ML	-RA 147, 14	48) C	oast Prairie	Redox (A16)		
Black His	tic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 14	l7, 148)		
Hydroger	Sulfide (A4)		Loamy Gle	yed Matrix (F	2)		P	iedmont Flo	odplain Soils	(F19)	
Stratified	Layers (A5)		Depleted M	latrix (F3)				(MLRA 13	86, 147)		
2 cm Muc	k (A10) (LRR N)		Redox Dark	k Surface (F6	6)		V	ery Shallow	Dark Surface	(TF12)	
Depleted	Below Dark Surface (A	.11)	Depleted D	ark Surface ((F7)		_ 0	ther (Explai	n in Remarks))	
Thick Dar	k Surface (A12)		Redox Dep	ressions (F8)		<u> </u>				
Sandy Mu	icky Mineral (S1)		Iron-Manga	nese Masse	s (F12)						
(LRR N, I	MLRA 147,148)		(LRR N, MI								
Sandy Gl	eyed Matrix (S4)		Umbric Sur	face (F13) (MLRA 136	, 122)	³Indica	tors of hydr	ophytic vegeta	ation and	
Sandy Re	- , ,			loodplain So				-	ology must be		
	Matrix (S6)			: Material (F2					ped or problen		
					(, ou o. p. o		
Restrictive La	yer (if observed):										
Type:			_								
Depth (inc	hes):		_				Hydric Soil P	resent?	Yes	No	X
Remarks:											
S	oils very disturbed due	to mining, rocky	refusal at 3 in								

Project/Site:	Bright Mountain Solar	Cit	y/County:	Hazard, Perry	County	Sampling Date:	04/13/2022
Applicant/Owner:		rid Renewables, LLC	· · · —	-	tate: Kentucky	Sampling Point:	05-W013-1W
Investigator(s):	CS, JK, RMS	Se	ction, Township, F	Range:	Cir	ty of Hazard	
Landform (hillslope, terrace, et			cal relief (concave		concav	e Slope	e (%): 3-8
Subregion (LRR or MLRA):	LRR N	Lat:	37.291229	Long:	-83.29367		
Soil Map Unit Name:	Fairpoint and Bethesda	soils, 2 to 70 percent	slopes, benched,	, stony	NWI classification	on:	
Are climatic / hydrologic condit					_ , explain in Remark	(s.)	
Are Vegetation , Soil	l , or Hydrology	significantly dis	sturbed?	Are "Normal Cir	cumstances" prese	ent? Yes	X No
Are Vegetation , Soil	, or Hydrology	naturally proble	ematic?	(If needed, expl	ain any answers in	Remarks.)	
SUMMARY OF FINDING				tions, transe	cts, important	features, etc.	
Hydrophytic Vegetation Pres	-			,	· ·	· · · · · · · · · · · · · · · · · · ·	
Hydric Soil Present?	Yes X		Is the Sa	mpled Area			
Wetland Hydrology Present				Wetland?	Yes X	No	
Welland Trydrology Tresent	100		Within a		103 /		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indica	toro						
1		that apply)			Cocondon India	ators (minimum of	two required)
Primary Indicators (minimun X Surface Water (A1)	n of one required, check all	True Aquatic Plan	to (P14)			I Cracks (B6)	two required)
X Surface Water (A1) High Water Table (A2)	-	Hydrogen Sulfide	, ,			egetated Concave	Surface (D9)
Saturation (A3)	-	X Oxidized Rhizosp		loots (C3)		atterns (B10)	Surface (Bo)
Water Marks (B1)	-	Presence of Redu	_	10015 (03)	Moss Trim I		
Sediment Deposits (B2	- -	Recent Iron Redu	` ,	ls (C6)		n Water Table (C2)	
Drift Deposits (B3)	-	Thin Muck Surfac		15 (CO)	Crayfish Bu	` ,	
Algal Mat or Crust (B4)	-	Other (Explain in				/isible on Aerial Im	nagory (CQ)
Iron Deposits (B5)	-	Other (Explain III	ixemarks)			Stressed Plants (D	
Inundation Visible on A	orial Imageny (R7)					c Position (D2)	')
Water-Stained Leaves	, ,				Shallow Aq	, ,	
Aquatic Fauna (B13)	(69)					raphic Relief (D4)	
Aquatic Fauria (B13)					X FAC-Neutra		
					77 1710 110000		
Field Observations:							
Surface Water Present?	Yes X No	Depth (inches):	1				
Water Table Present?	Yes No	Depth (inches):					
Saturation Present?	Yes No	Depth (inches):		Wetland Hyd	Irology Present?	Yes X	No
(includes capillary fringe)							
5 " 5 1 15 / /							
Describe Recorded Data (st	ream gauge, monitoring we	ell, aerial photos, previ	ous inspections),	if available:			
Remarks:							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W013-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 20 x 1 = 50% of total cover: 20% of total cover: FACW species 60 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 5 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.88 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass **FACW** 2. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai 20 OBL Yes ¹Indicators of hydric soil and wetland hydrology must 3. Trifolium pratense / Red clover 5 FACU be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 42 20% of total cover: 17 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W013-1W</u>

	ription: (Describe to th	ne depth need			or confirm	the abser	nce of indicators	s.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Features %	Type ¹	Loc²	Texture	Remark	re
(inches)		90		10	C			Remark	
0-6	10YR 4/2	90	7.5YR 5/8	10		PL,M	Clay Loam		
				. ——			•		
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduce	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	tion: PL=Pore Lining, M	=Matrix.
Hydric Soil II	ndicators:						Indicators	for Problematic Hydr	ic Soils³:
Histosol	(A1)		Dark Surfac	ce (S7)			2 (cm Muck (A10) (MLRA	147)
	ipedon (A2)			Below Surfac	e (S8) (M	LRA 147. 1		past Prairie Redox (A16	•
Black His				Surface (S9)				(MLRA 147, 148)	,
	n Sulfide (A4)			yed Matrix (F		,,	Pi	edmont Floodplain Soils	(F19)
	Layers (A5)		X Depleted M		-,		' '	(MLRA 136, 147)	
	ck (A10) (LRR N)			κ Surface (F6	3)		Ve	ery Shallow Dark Surfac	o (TE12)
_	Below Dark Surface (A	۸ 11)		ark Surface (her (Explain in Remarks	• •
_		411)					0	nei (Expiain in Remark	5)
_	rk Surface (A12)			ressions (F8					
	ucky Mineral (S1)			nese Masse	S (F12)				
	MLRA 147,148)		(LRR N, MI	•		. 400)	21 11 1		
	leyed Matrix (S4)			face (F13) (ors of hydrophytic vege	
	edox (S5)			loodplain So				etland hydrology must b	
Stripped	Matrix (S6)		Red Parent	Material (F2	21) (MLR /	A 127, 147)	un	less disturbed or proble	ematic.
Postriotivo I	ayer (if observed):								
	ayer (ii observed):								
Type:	-I \.						United States		. Ni-
Depth (in	cnes):						Hydric Soil P	resent? Yes X	
Remarks:									
	Rock refusal at 10 in								

Project/Site:	Bright Mountain Solar		City/County: _	Hazard, Perry	County	Sampling Date:	04/13/2022
Applicant/Owner:	<u> </u>	Renewables, LL	.C	Sta	ate: Kentucky	Sampling Point:	05-W015-1U
Investigator(s):	JK		Section, Towns	ship, Range:	Cit	ty of Hazard	
Landform (hillslope, terrace, etc	c): Hillslope		Local relief (co	ncave, convex, none):	conve	c Slope	e (%): 8-16
Subregion (LRR or MLRA):	LRR N	Lat:	37.2910	S21 Long:	-83.284407	29 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda so	ils, 2 to 70 perc	ent slopes, ber	iched, stony	NWI classification	on:	
Are climatic / hydrologic condition	ons on the site typical for this	time of year?	Yes X	No (If no,	explain in Remark	(s.)	
Are Vegetation, Soil	X , or Hydrology	significantly	disturbed?	Are "Normal Circ	cumstances" prese	ent? Yes	X No
	, or Hydrology		oblematic?	(If needed, expla	ain any answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map sh	owing sam	pling point	locations, transed	ts, important	features, etc.	
Hydrophytic Vegetation Prese	ent? Yes	No X			-		
Hydric Soil Present?	Yes	No X	- Isti	ne Sampled Area			
Wetland Hydrology Present?		No X	-	nin a Wetland?	Yes	No X	
			- """				_
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicate	ors:						
1	of one required: check all that	t apply)			Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	· · · · · · · · · · · · · · · · · · ·	True Aquatic P	Plants (B14)			l Cracks (B6)	
High Water Table (A2)	_	Hydrogen Sulfi	, ,			getated Concave	Surface (B8)
Saturation (A3)	_			ring Roots (C3)		atterns (B10)	,
Water Marks (B1)	_	Presence of R	educed Iron (C	4)	Moss Trim I	, ,	
Sediment Deposits (B2)	_	Recent Iron Re	eduction in Tille	ed Soils (C6)		Water Table (C2)	
Drift Deposits (B3)	_	Thin Muck Sur		, ,	Crayfish Bu		
Algal Mat or Crust (B4)	_	Other (Explain				/isible on Aerial Im	agery (C9)
Iron Deposits (B5)	_	` .	•			Stressed Plants (D	
Inundation Visible on Ae	erial Imagery (B7)				Geomorphic	Position (D2)	,
Water-Stained Leaves (I	• • • •				Shallow Aq	, ,	
Aquatic Fauna (B13)	,					raphic Relief (D4)	
_ ` ` ` ` `					FAC-Neutra		
					<u> </u>		
Field Observations:							
Surface Water Present?	Yes NoX	Depth (inche	·				
Water Table Present?	Yes NoX	Depth (inche	· —				
Saturation Present?	Yes NoX	Depth (inche	s):	Wetland Hyd	rology Present?	Yes	No X
(includes capillary fringe)							
Describe Recorded Data (stro	eam gauge, monitoring well, a	erial photos pr	evious inspecti	ons) if available			
Describe Necorded Bata (Str	sam gaage, monitoring well, e	criai priotos, pr	CVIOUS INSPECT	ons), ii avallable.			
Remarks:							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W015-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 3 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = ___ Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 50 200 FACU species x 4 = UPL species 15 x 5 = Column Totals: 65 (A) Prevalence Index = B/A = 4.23 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem **FACU** 2. Lotus corniculatus / Bird's foot trefoil, Bird's-foot trefoil 20 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 15 NI be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 32 20% of total cover: 13 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W015-1U

Depth	Matrix			Features	or commi	the absent	ce of indicator	3.,			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remark	s	
0-3	10YR 4/2	100	Color (molety		.,,,,,		Silt Loam	Very grav			
	-					 .		·			
ype: C=Con	centration, D=Depletio	n, RM=Redu	ced Matrix, MS=Masl	ked Sand Gr	ains.		²Loca	ation: PL=P	ore Lining, M	=Matrix.	
ydric Soil Ir	ndicators:						Indicator	s for Proble	ematic Hydri	c Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A	A10) (MLRA	147)	
Histic Ep	ipedon (A2)			Below Surfac			18) C	oast Prairie	Redox (A16))	
Black His	stic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 14			
Hydroge	n Sulfide (A4)			yed Matrix (F	2)		P	iedmont Flo	odplain Soils	(F19)	
	Layers (A5)		Depleted M					(MLRA 1			
	ck (A10) (LRR N)			k Surface (F			_	-	Dark Surface		
	Below Dark Surface (A	411)		ark Surface			<u> </u>	ther (Explai	in in Remarks	s)	
_	rk Surface (A12)			ressions (F8							
_ ′	ucky Mineral (S1)			anese Masse	s (F12)						
	MLRA 147,148)		(LRR N, M		MI DA 126	122\	3lpdiog	toro of buden	anhutia vaas	tation and	
	leyed Matrix (S4) edox (S5)			face (F13) (Floodplain Sc		-			ophytic vege ology must be		
	Matrix (S6)			t Material (F2					bed or proble		
_ Guipped	Watrix (00)		red r aren	t iviateriai (i z	(MEIX	121, 141)		niess distan	bed of proble	matio.	
	ayer (if observed):										
Type:									.,		.,
Depth (inc	cnes):						Hydric Soil F	resent?	Yes	No	Х
	Soils Have been disturb										
	Soils Have been disturt Rock refusal 3 inch, Mu										
9											
9											
9											
9											
9											
9											
5											
5											
9											
5											
5											
5											
5											
5											
5											
9											

Project/Site:	Bright Mo	untain :	Solar		City/Cou	ntv:	Hazard, Perry	County	Sampling Dat	e: 04/13/20	022
Applicant/Owner:				Renewables, I	•			ate: Kentucky	Sampling Poir		
Investigator(s):		JK			Section,	Township, R	ange:	Ci	ty of Hazard		
Landform (hillslope, terrace, etc	c):		Terrace		•	• •	convex, none):	concav	•	lope (%): 0	0-3
Subregion (LRR or MLRA):		LRR N	1	Lat:	•	29109479	Long:	-83.284280		atum: WGS	84
Soil Map Unit Name:	Fairpoint	and Be	ethesda s	oils, 2 to 70 pe	rcent slope	s, benched,		NWI classificati			
Are climatic / hydrologic conditi								– , explain in Remarl	(s.)		
Are Vegetation , Soil				•				cumstances" pres	,	X No	
Are Vegetation , Soil								ain any answers in			
SUMMARY OF FINDING								-	•	c.	
Hydrophytic Vegetation Pres		Yes	-		- J J		,		,		
Hydric Soil Present?	entr	Yes		No	_	la tha San	npled Area				
Wetland Hydrology Present?		Yes		No	_	within a V	•	Yes X	No		
Welland Hydrology Fresent:			<u> </u>			within a v	retialiu:	163	110		
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicat											
Primary Indicators (minimum	of one requ	ired: ch	neck all th					Secondary Indic	•	of two required	<u>(t</u>
X Surface Water (A1)				True Aquatic					il Cracks (B6)		
High Water Table (A2)				Hydrogen Su			. (00)		_	ive Surface (B8)
Saturation (A3)			<u>X</u>	•		•	oots (C3)		atterns (B10)		
Water Marks (B1)			_	Presence of		` '	(00)		Lines (B16)	20)	
Sediment Deposits (B2))		_	Recent Iron I			s (C6)		n Water Table (0	ر2)	
Drift Deposits (B3)			_	Thin Muck S				Crayfish Bu		L Image many (CO)	
Algal Mat or Crust (B4)			_	Other (Expla	ın ın Rema	irks)			Visible on Aeria	. ,	
Iron Deposits (B5)		. (DZ)							Stressed Plants	, (DT)	
Inundation Visible on A		/ (B/)							c Position (D2)		
Water-Stained Leaves (В9)							Shallow Aq		. 4)	
X Aquatic Fauna (B13)								X FAC-Neutra	raphic Relief (D	4)	
								X TAO-Neutra	ir rest (D5)		
Field Observations:											
Surface Water Present?	Yes	Χ	No	Depth (inch	ies):	2					
Water Table Present?	Yes		No X	Depth (inch	ies):						
Saturation Present?	Yes		No X	Depth (inch	ies):		Wetland Hyd	Irology Present?	Yes X	. No	
(includes capillary fringe)				<u> </u>							
Describe Recorded Data (str	eam gauge,	monito	ring well,	aerial photos, p	orevious in	spections), if	available:				
Remarks:											
- Normanion											
i											

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W015-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 70 x 1 = 50% of total cover: 20% of total cover: FACW species 10 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 10 x 5 = Column Totals: 90 (A) Prevalence Index = B/A = 1.56 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: 5 Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai OBL 2. Scirpus cyperinus / Woolgrass 10 No FACW ¹Indicators of hydric soil and wetland hydrology must 3. Aster / Aster 10 NI be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 45 20% of total cover: 18 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W015-1W</u>

	iption: (Describe to th	ne depth nee			or confirm	the absen	ice of indicator	's.)		
Depth (inches)	Matrix Color (moist)	%		Features	Tura = 1	1 6 5 2	Tout		Domestic	
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc²	Texture	V	Remarks	
0-9	10YR 4/1	95	7.5YR 5/8	5	<u> </u>	M,PL	Clay Loam	Very grave	eiy	
										
							(-			
¹Type: C=Con	centration, D=Depletion	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	ation: PL=Po	ore Lining, M=Ma	trix.
Hydric Soil Ir	ndicators:						Indicators	s for Proble	ematic Hydric So	nils³.
Histosol			Dark Surfac	ce (S7)					(MLRA 147)	
	ipedon (A2)			Below Surfac	e (S8) (M	RΔ 147 1			Redox (A16)	
Black His				Surface (S9)			— °	(MLRA 14		
	n Sulfide (A4)			yed Matrix (F		+1, 140)	Di	•	odplain Soils (F1	۵)
	Layers (A5)		X Depleted M		-)			MLRA 13		~ <i>,</i>
	ck (A10) (LRR N)			Surface (F6	3)		V	-	Dark Surface (TF	=12)
	Below Dark Surface (A	11 1		ark Surface (-	n in Remarks)	12)
	rk Surface (A12)	(11)		ressions (F8			<u> </u>	uioi (Explai	ii iii rteiliaite)	
	ucky Mineral (S1)			nese Masse						
	MLRA 147,148)		(LRR N, MI		3 (1 12)					
•	leyed Matrix (S4)			face (F13) (MI RA 136	122)	3Indica	tors of hydr	ophytic vegetatio	n and
	edox (S5)			loodplain So					ology must be pre	
	Matrix (S6)			Material (F2					oed or problemati	
	manx (GG)			- Matorial (1 2	, (III-II	, ,		nooc diotark	ou or probleman	
Restrictive L	ayer (if observed):									
Type:	Compacted s	soils								
Depth (inc	ches):	9					Hydric Soil P	resent?	Yes X	No
Remarks:	Soils recently disturbed	due to mining	g activities.							

Project/Site:	Bright M	lountain Solar		City/Co	ounty:	Hazard, Perry	/ County	Sampling Date:	04/13/2022
Applicant/Owner:			rid Renewak		·		tate: Kentucky	Sampling Point:	05-W016-1U
Investigator(s):		JK		Section	n, Township, Ra	nge:	Cit	ty of Hazard	
Landform (hillslope, terrace, e	tc):	Hillslop	ре		relief (concave,		conve	x Slope	e (%): 0-3
Subregion (LRR or MLRA):		LRR N	L	at: 3	37.2914559	Long:	-83.292222	38 Datu	m: WGS 84
Soil Map Unit Name:	Fairpo	int and Bethesda	soils, 2 to 7	0 percent slo	pes, benched, s	tony	NWI classification	on:	
Are climatic / hydrologic condi	tions on the	e site typical for t	his time of y	ear? Yes	X No	(If no	, explain in Remark	(s.)	
Are Vegetation, Soi	I <u>X</u>	, or Hydrology _	signi	icantly disturb	ped?	Are "Normal Ci	rcumstances" prese	ent? Yes	X No
Are Vegetation, Soi	l,	, or Hydrology	natuı	ally problema	tic?	(If needed, exp	lain any answers in	Remarks.)	
SUMMARY OF FINDING	GS - Atta	ch site map	showing	sampling	point location	ons, transe	cts, important	features, etc.	
Hydrophytic Vegetation Pre	sent?	Yes	No	Χ					
Hydric Soil Present?		Yes	No	X	Is the Sam	pled Area			
Wetland Hydrology Present	?	Yes	No	Χ	within a W		Yes	No X	<u> </u>
Remarks:									
HYDROLOGY									
Wetland Hydrology Indica	tors:								
Primary Indicators (minimur		quired: check all	that annly)				Secondary Indica	ators (minimum of	two required)
Surface Water (A1)		quii oui oiiooii uii	,	uatic Plants (B14)			l Cracks (B6)	o .oquou/
High Water Table (A2)		-		en Sulfide Od	,			egetated Concave	Surface (B8)
Saturation (A3)		-			es on Living Roo	ots (C3)		atterns (B10)	, ,
Water Marks (B1)		-	Present	e of Reduced	d Iron (C4)	` '	Moss Trim I		
Sediment Deposits (B2	<u>'</u>)	-	Recent	Iron Reductio	n in Tilled Soils	(C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)		_	Thin Mu	ick Surface (C	C7)		Crayfish Bu	rrows (C8)	
Algal Mat or Crust (B4))	<u>_</u>	Other (I	Explain in Ren	narks)		Saturation \	/isible on Aerial Im	nagery (C9)
Iron Deposits (B5)		-					Stunted or S	Stressed Plants (D	_' 1)
Inundation Visible on A	erial Image	ery (B7)					Geomorphic	c Position (D2)	
Water-Stained Leaves	(B9)						Shallow Aq	uitard (D3)	
Aquatic Fauna (B13)							Microtopogi	raphic Relief (D4)	
							FAC-Neutra	al Test (D5)	
Field Observations:									
Surface Water Present?	Yes	No >	K Depth	(inches):					
Water Table Present?	Yes			(inches):	_				
Saturation Present?	Yes			(inches):	_	Wetland Hyd	drology Present?	Yes	No X
(includes capillary fringe)			<u>. </u>	(gy		· · · · · · · · · · · · · · · · · · ·
Describe Recorded Data (st	tream daud	e monitoring we	ll aerial nho	itos previous	inenactions) if	availahla:			
Describe Necorded Data (5)	ream gaug	e, monitoring we	ii, aeriai pric	itos, previous	mspections), ii d	avallable.			
Remarks:									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W016-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 85 FACU species x 4 = UPL species 20 x 5 = 100 440 Column Totals: 105 (A) Prevalence Index = B/A = 4.19 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Poa pratensis / Kentucky blue grass **FACU** 25 FACU 2. Trifolium pratense / Red clover Yes ¹Indicators of hydric soil and wetland hydrology must 3. Lotus corniculatus / Bird's foot trefoil, Bird's-foot trefoil 20 No FACU be present, unless disturbed or problematic. 4. Aster / Aster **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 105 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 52 20% of total cover: 21 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W016-1U</u>

		he depth ne	eded to document th		or confirm	the abse	nce of indicators	5.)		
Depth (inches)	Matrix Color (moist)	0/		K Features	Tree of	1 = -2	Tandon-		Domeste	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc²	Texture	\/	Remarks	
0-18	10YR 4/3	50					Silt Loam	Very gravel	у	
0-18	2.5YR 5/8	50					Slty Clay Loam			
-	-									
-										
	<u></u>									
¹Type: C=Cor	ncentration, D=Depletio	n, RM=Redu	ced Matrix, MS=Masl	ked Sand Gr	ains.		²Loca	tion: PL=Por	e Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Problem	natic Hydric Soils³:	
Histosol			Dark Surfa	ce (S7)					10) (MLRA 147)	
_	pipedon (A2)			Below Surfac	e (S8) (M I	RA 147 1		•	Redox (A16)	
	stic (A3)			Surface (S9)	. , .		=	(MLRA 147		
						11, 140)	Di	•	•	
	en Sulfide (A4)			yed Matrix (F	۷)		<u> </u>		dplain Soils (F19)	
	d Layers (A5)		Depleted M		2)			(MLRA 136		
	ick (A10) (LRR N)			k Surface (F				-	Dark Surface (TF12)	
	d Below Dark Surface (A11)		ark Surface			Ot	her (Explain	in Remarks)	
	ark Surface (A12)			ressions (F8						
Sandy M	lucky Mineral (S1)		Iron-Manga	anese Masse	s (F12)					
(LRR N,	MLRA 147,148)		(LRR N, M	LRA 136)						
Sandy G	Gleyed Matrix (S4)		Umbric Sui	rface (F13)	MLRA 136	, 122)	³Indicat	ors of hydro	phytic vegetation and	
Sandy R	Redox (S5)		Piedmont F	loodplain Sc	oils (F19) (N	/ILRA 148) we	tland hydrol	ogy must be present.	
Stripped	Matrix (S6)		Red Paren	t Material (F2	21) (MLRA	127, 147) un	less disturbe	ed or problematic.	
_			<u> </u>				· 			
Restrictive L	.ayer (if observed):									
Restrictive L	ayer (if observed):									
Type:							Hydric Soil P	resent?	Yes No	X
			<u>—</u>				Hydric Soil P	resent?	Yes No _	<u> </u>
Type: Depth (in Remarks:	ches):		ining patition.				Hydric Soil P	resent?	Yes No _	X
Type:		bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	<u> </u>
Type:	ches):	bed due to m	ining activity.				Hydric Soil Pi	resent?	Yes No _	<u>x</u>
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	<u> </u>
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil Pr	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil Pr	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil Pr	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X
Type: Depth (in Remarks:	ches):	bed due to m	ining activity.				Hydric Soil P	resent?	Yes No _	X

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	05-W016-1W
Investigator(s):	JK	Section, Township,	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Terrace	Local relief (concav	/e, convex, none):	concave	e Slope	e (%): 0-3
Subregion (LRR or MLRA):	LRR N Lat:	37.29244887	Long:	-83.2823632	27 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe	ercent slopes, bencher	d, stony	NWI classification	on:	
	ons on the site typical for this time of year?			xplain in Remark	s.)	
Are Vegetation , Soil		itly disturbed?	Are "Normal Circu	mstances" prese	nt? Yes	X No
	, or Hydrologynaturally		(If needed, explain	•		
	S - Attach site map showing sa		•	-	·	
	•		<u> </u>	s, important	outuros, oto.	
Hydrophytic Vegetation Prese		_	II A			
Hydric Soil Present?	Yes <u>X</u> No		ampled Area	., .,		
Wetland Hydrology Present?	Yes <u>X</u> No	within a	Wetland?	Yes X	No	
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
	of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)
Surface Water (A1)	True Aquation	c Plants (B14)		Surface Soil	Cracks (B6)	
High Water Table (A2)	Hydrogen S	ulfide Odor (C1)		Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	X Oxidized Rh	nizospheres on Living I	Roots (C3)	Drainage Pa	itterns (B10)	
X Water Marks (B1)	Presence of	Reduced Iron (C4)		Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Recent Iron	Reduction in Tilled Sc	oils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin Muck S	Surface (C7)		Crayfish Bui	rows (C8)	
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)	_	Saturation V	isible on Aerial Im	agery (C9)
Iron Deposits (B5)			_	Stunted or S	Stressed Plants (D	1)
Inundation Visible on Ae	rial Imagery (B7)		-	Geomorphic	Position (D2)	
Water-Stained Leaves (E	39)		-	Shallow Aqu	itard (D3)	
Aquatic Fauna (B13)			•	Microtopogr	aphic Relief (D4)	
			- -	X FAC-Neutra	Test (D5)	
Field Observations						
Field Observations:	Van Na V Danth (in a	h).				
Surface Water Present?	Yes No X Depth (inc	· —	=			
Water Table Present?	Yes No X Depth (inc		-		., .,	
Saturation Present?	Yes NoX Depth (inc	nes):	_ Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections)	, if available:			
Remarks:						
Nomano.						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W016-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 50 x 1 = 50% of total cover: 20% of total cover: FACW species 10 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 10 x 5 = Column Totals: 70 (A) Prevalence Index = B/A = 1.71 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai 10 No NI 2. Aster / Aster ¹Indicators of hydric soil and wetland hydrology must 3. Scirpus cyperinus / Woolgrass 10 FACW be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 35 20% of total cover: 14 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W016-1W</u>

	iption: (Describe to th	ne depth nee			or confirm	the absen	ice of indicator	's.)		
Depth (inches)	Matrix Color (moist)	%		Features	Tura = 1	1 6 5 2	Tout		Domestic	
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc²	Texture	V	Remarks	
0-9	10YR 4/1	95	7.5YR 5/8	5	<u> </u>	M,PL	Clay Loam	Very grave	eiy	
										
							(
¹Type: C=Con	centration, D=Depletion	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	ation: PL=Po	ore Lining, M=Ma	trix.
Hydric Soil Ir	ndicators:						Indicators	s for Proble	ematic Hydric So	nils³.
Histosol			Dark Surfac	ce (S7)					(MLRA 147)	
	ipedon (A2)			Below Surfac	e (S8) (M	RΔ 147 1			Redox (A16)	
Black His				Surface (S9)			— °	(MLRA 14		
	n Sulfide (A4)			yed Matrix (F		+1, 140)	Di	•	odplain Soils (F1	۵)
	Layers (A5)		X Depleted M		-)			MLRA 13		~ <i>,</i>
	ck (A10) (LRR N)			Surface (F6	3)		V	-	Dark Surface (TF	=12)
	Below Dark Surface (A	11 1		ark Surface (-	n in Remarks)	12)
	rk Surface (A12)	(11)		ressions (F8			<u> </u>	uioi (Explai	ii iii rteiliaite)	
	ucky Mineral (S1)			nese Masse						
	MLRA 147,148)		(LRR N, MI		3 (1 12)					
•	leyed Matrix (S4)			face (F13) (MI RA 136	122)	3Indica	tors of hydr	ophytic vegetatio	n and
	edox (S5)			loodplain So					ology must be pre	
	Matrix (S6)			Material (F2					oed or problemati	
	manx (GG)			- Matorial (1 2	, (III-II	, ,		nooc diotark	ou or probleman	
Restrictive L	ayer (if observed):									
Type:	Compacted s	soils								
Depth (inc	ches):	9					Hydric Soil P	resent?	Yes X	No
Remarks:	Soils recently disturbed	due to mining	g activities.							

Project/Site:	Bright Mountain Solar		City/County:	Hazard, Perry	/ County	Sampling Date:	04/13/2022
Applicant/Owner:		grid Renewables, LL		-	tate: Kentucky	Sampling Point:	05-W017-1U
Investigator(s):	JK, CS, RS	,	Section, Township			y of Hazard	
Landform (hillslope, terrace, etc				ve, convex, none):		•	e (%): 0
Subregion (LRR or MLRA):	LRR N	Lat:	37.29321885	•	-83.2830182		
Soil Map Unit Name:	Fairpoint and Betheso	a soils, 2 to 70 perc			NWI classification		
Are climatic / hydrologic condition					— , explain in Remark		
	X , or Hydrology			Are "Normal Ci	rcumstances" prese	ent? Yes	X No
Are Vegetation , Soil		naturally pro	oblematic?		lain any answers in		
SUMMARY OF FINDING				ations. transe	cts. important	features, etc.	
Hydrophytic Vegetation Prese		No X		<u> </u>	, p		
Hydric Soil Present?	Yes	NoX	- le the S	Sampled Area			
Wetland Hydrology Present?		No X	-	a Wetland?	Yes	No X	
welland Hydrology Fresent:		NOX	- within s			NO	
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicate	oro:						
Primary Indicators (minimum		Il that apply			Cocondon/Indica	otoro (minimum of	two required)
Surface Water (A1)	of one required, check a	True Aquatic F	Plants (P14)			ators (minimum of I Cracks (B6)	two required)
High Water Table (A2)		Hydrogen Sulf				getated Concave	Surface (D9)
Saturation (A3)			ospheres on Living	Poots (C3)		atterns (B10)	Surface (DO)
Water Marks (B1)			educed Iron (C4)	Noois (C3)	Moss Trim L	` ,	
Sediment Deposits (B2)			eduction in Tilled S	oils (C6)		Water Table (C2)	
Drift Deposits (B3)		Thin Muck Sur		5113 (00)	Crayfish Bu		
Algal Mat or Crust (B4)		Other (Explain	` ,			/isible on Aerial Im	nagery (C9)
Iron Deposits (B5)		Other (Explain	iii Remarks)			Stressed Plants (D	
Inundation Visible on Ae	arial Imageny (R7)					Position (D2)	')
Water-Stained Leaves (Shallow Aqu	, ,	
Aquatic Fauna (B13)	50)					aphic Relief (D4)	
					FAC-Neutra	. , ,	
					_		
Field Observations:							
Surface Water Present?	Yes No	X Depth (inche	s):	_			
Water Table Present?	Yes No	X Depth (inche	s):	_			
Saturation Present?	Yes No	X Depth (inche	s):	_ Wetland Hyd	drology Present?	Yes	No X
(includes capillary fringe)							
Describe Recorded Data (str	aom gougo, monitoring u	roll agrical photograp	rovious inoncations	\ if available:			
Describe Recorded Data (str	eam gauge, monitoring w	eli, aeriai pnotos, pr	evious inspections), if available:			
Remarks:							
İ							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W017-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 15 FACU species x 4 = UPL species 70 x 5 = 350 85 Column Totals: (A) Prevalence Index = B/A = 4.82 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 Problematic Hydrophytic Vegetation¹ (Explain) 1. Aster / Aster 2. Cerastium fontanum / Common mouse ear chickweed FACU ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 85 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 42 20% of total cover: 17 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 05-W017-1U

Profile Descri	ption: (Describe to the	e depth neede	d to document th	e indicator o	or confirm	the absen	ce of indicator	s.)	•		
Depth	Matrix		Redox	Features							
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc²	Texture		Remarks		
0-3	10YR 3/2	100					Silt Loam				
¹Type: C=Cond	centration, D=Depletion	, RM=Reduced	Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	tion: PL=Po	re Lining, M=I	Matrix.	
Hydric Soil In	dicators:						Indicators	for Proble	matic Hydric	Soils³:	
Histosol (Dark Surface	ce (S7)					10) (MLRA 1 4		
	pedon (A2)			Selow Surface	e (S8) (ML	RA 147, 1			Redox (A16)	,	
Black His				Surface (S9)			<i>'</i> —	(MLRA 14	, ,		
	Sulfide (A4)			ed Matrix (F		, ,	Pi	-	odplain Soils (F19)	
	Layers (A5)		Depleted M		,			(MLRA 13		- /	
	k (A10) (LRR N)			Surface (F6	6)		Ve	•	Dark Surface	(TF12)	
	Below Dark Surface (A	11)		ark Surface (-	in Remarks)	,	
	k Surface (A12)	,		ressions (F8				()	,		
	icky Mineral (S1)			nese Masse							
	/ILRA 147,148)		(LRR N, MI		- ()						
•	eyed Matrix (S4)		•	face (F13) (MLRA 136	. 122)	3Indicat	ors of hydro	phytic vegeta	tion and	
Sandy Re	- , ,			loodplain So					logy must be		
	Matrix (S6)			Material (F2					ed or problem		
				(, _	(· ·-·, · ···,					
Restrictive La	yer (if observed):										
Type:			_								
Depth (inc	nes):		_				Hydric Soil P	resent?	Yes	No _	X
Damadaa											
Remarks:	oils disturbed due to mi	ine 3 in refusal	- sampled multiple	locations							
		,									

Project/Site:	Bright Mountain Solar	City/Cou	ınty: Hazar	d, Perry County		Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid Re	newables, LLC		State: K	Centucky	Sampling Point:	05-W017-1W
Investigator(s):	CM, RMS, JK	Section,	Township, Range:		City	y of Hazard	
Landform (hillslope, terrace, etc): Bowl shaped depres	sion Local re	lief (concave, convex,	none):	concave	Slope	e (%): 0-2
Subregion (LRR or MLRA):	LRR N	Lat: 37	.29307367 L	ong:	83.2829278	33 Datu	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils	, 2 to 70 percent slope	es, benched, stony	NWI	classificatio	n:	
Are climatic / hydrologic condition	ons on the site typical for this tim	ne of year? Yes	X No	(If no, explain	in Remarks	s.)	
Are Vegetation, Soil	X, or Hydrology	significantly disturbe	ed? Are "Nor	rmal Circumstar	nces" prese	nt? Yes	X No
Are Vegetation, Soil	X, or Hydrology	naturally problemati	c? (If neede	ed, explain any	answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map sho	wing sampling p	oint locations, tr	ransects, im	portant f	eatures, etc.	
Hydrophytic Vegetation Prese	ent? Yes X	No					
Hydric Soil Present?		No	Is the Sampled Ar	ea			
Wetland Hydrology Present?		No	within a Wetland?		Yes X	No	
, ,,			<u> </u>				
Remarks:							
Reclaimed coal	mine						
HYDROLOGY							
Wetland Hydrology Indicato	nrs.						
1	of one required: check all that a	nnly)		Secon	ndary Indica	tors (minimum of	two required)
X Surface Water (A1)	· · · · · · · · · · · · · · · · · · ·	rue Aquatic Plants (B	14)		•	Cracks (B6)	two roquirou)
High Water Table (A2)		ydrogen Sulfide Odor	•			getated Concave	Surface (B8)
Saturation (A3)			s on Living Roots (C3)			itterns (B10)	Curidoo (Bo)
Water Marks (B1)		resence of Reduced			Noss Trim L		
Sediment Deposits (B2)		ecent Iron Reduction	` ,			Water Table (C2)	
Drift Deposits (B3)		hin Muck Surface (C7	, ,		Crayfish Bur	, ,	
Algal Mat or Crust (B4)		ther (Explain in Rema				isible on Aerial Im	nagery (C9)
Iron Deposits (B5)	_ ~	and (Explain in Nome	ino)			tressed Plants (D	
Inundation Visible on Ae	rial Imagen/ (B7)					Position (D2)	',
Water-Stained Leaves (E	• • • •				Shallow Aqu	, ,	
Aquatic Fauna (B13)	55)				=	aphic Relief (D4)	
					AC-Neutral		
Field Observations:							
Surface Water Present?	Yes NoX	Depth (inches):	2				
Water Table Present?	Yes NoX	Depth (inches):					
Saturation Present?	Yes NoX	Depth (inches):	Wetla	ind Hydrology	Present?	Yes X	No
(includes capillary fringe)							
Describe Descrided Data (atra	an acusa manitaring wall con	ial photos, provious ir	annostiona) if available	<u> </u>			
Describe Recorded Data (site	eam gauge, monitoring well, aer	iai priotos, previous ir	ispections), ii available	₽.			
Remarks:							
1							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W017-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species 75 x 1 = ___ 50% of total cover: 20% of total cover: FACW species 30 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 10 FACU species x 4 = UPL species 10 x 5 = 225 Column Totals: 125 (A) Prevalence Index = B/A = 1.8 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 10 = Total Cover X 3 - Prevalence Index ≤3.01 5 20% of total cover: 50% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha latifolia / Broadleaf cattail, Broad-leaved cattail OBL 2. Scirpus cyperinus / Woolgrass 30 Yes **FACW** ¹Indicators of hydric soil and wetland hydrology must 3. Andropogon virginicus / Broomsedge bluestem 10 FACU be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 115 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 23 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W017-1W</u>

	iption: (Describe to th	ne depth need			or confirm	the absen	ice of indicator	s.)		
Depth (inches)	Matrix	%		Features	Tuno1	1 002	Taytura		Domorko	
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Clay Learn	Dooley rofus	Remarks	realeimed seel
0-8	5Y 4/1	98	7.5YR 5/8	2	<u> </u>	<u>M</u>	Clay Loam	Rocky refus	ai muitipie pits,	reclaimed coal
								-		
								-		
								-		
								_		
								_		
								_		
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	ation: PL=Pore	e Lining, M=Ma	trix.
Hydric Soil II	ndicators:						Indicators	s for Problem	atic Hydric So	oils³:
Histosol			Dark Surfac	ce (S7)					O) (MLRA 147)	
	ipedon (A2)			Below Surfac	e (S8) (ML	.RA 147. 1		oast Prairie R		
Black His				Surface (S9)				(MLRA 147,		
	n Sulfide (A4)			yed Matrix (F		, ,	Pi	•	Iplain Soils (F19	9)
	Layers (A5)		X Depleted M		,			(MLRA 136,		-
	ck (A10) (LRR N)			ς Surface (F6	3)		Ve	•	ark Surface (TF	-12)
	Below Dark Surface (A	A11)		ark Surface				ther (Explain i	•	,
	rk Surface (A12)	ŕ		ressions (F8					,	
	ucky Mineral (S1)			nese Masse						
(LRR N,	MLRA 147,148)		(LRR N, MI	LRA 136)						
Sandy G	leyed Matrix (S4)		Umbric Sur	face (F13) (MLRA 136	, 122)	³Indica	tors of hydrop	hytic vegetation	n and
Sandy R	edox (S5)		Piedmont F	loodplain So	oils (F19) (N	ILRA 148)	W	etland hydrolo	gy must be pre	sent.
Stripped	Matrix (S6)		Red Parent	: Material (F2	21) (MLRA	127, 147)	ur	nless disturbe	d or problemation	c.
Restrictive L	ayer (if observed):									
Type:			<u></u>							
Depth (inc	ches):						Hydric Soil P	resent?	Yes X	No
Remarks:						I				
ixemaiks.										

Project/Site:	Bright Mountain Solar	City/Cou	ınty: Hazar	d, Perry County		Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid Re	newables, LLC		State: K	Centucky	Sampling Point:	05-W017-1W
Investigator(s):	CM, RMS, JK	Section,	Township, Range:		City	y of Hazard	
Landform (hillslope, terrace, etc): Bowl shaped depres	sion Local re	lief (concave, convex,	none):	concave	Slope	e (%): 0-2
Subregion (LRR or MLRA):	LRR N	Lat: 37	.29307367 L	ong:	83.2829278	33 Datu	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils	, 2 to 70 percent slope	es, benched, stony	NWI	classificatio	n:	
Are climatic / hydrologic condition	ons on the site typical for this tim	ne of year? Yes	X No	(If no, explain	in Remarks	s.)	
Are Vegetation, Soil	X, or Hydrology	significantly disturbe	d? Are "Nor	rmal Circumstar	nces" prese	nt? Yes	X No
Are Vegetation, Soil	X, or Hydrology	naturally problemati	c? (If neede	ed, explain any	answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map sho	wing sampling p	oint locations, tr	ransects, im	portant f	eatures, etc.	
Hydrophytic Vegetation Prese	ent? Yes X	No					
Hydric Soil Present?		No	Is the Sampled Ar	ea			
Wetland Hydrology Present?		No	within a Wetland?		Yes X	No	
, ,,			<u> </u>				
Remarks:							
Reclaimed coal	mine						
HYDROLOGY							
Wetland Hydrology Indicato	nrs.						
1	of one required: check all that a	nnly)		Secon	ndary Indica	tors (minimum of	two required)
X Surface Water (A1)	· · · · · · · · · · · · · · · · · · ·	rue Aquatic Plants (B	14)		•	Cracks (B6)	two roquirou)
High Water Table (A2)		ydrogen Sulfide Odor	•			getated Concave	Surface (B8)
Saturation (A3)			s on Living Roots (C3)			itterns (B10)	Curidoo (Bo)
Water Marks (B1)		resence of Reduced			Noss Trim L		
Sediment Deposits (B2)		ecent Iron Reduction	` ,			Water Table (C2)	
Drift Deposits (B3)		hin Muck Surface (C7	, ,		Crayfish Bur	, ,	
Algal Mat or Crust (B4)		ther (Explain in Rema				isible on Aerial Im	nagery (C9)
Iron Deposits (B5)	_ ~	and (Explain in Nome	ino)			tressed Plants (D	
Inundation Visible on Ae	rial Imagen/ (B7)					Position (D2)	',
Water-Stained Leaves (E	• • • •				Shallow Aqu	, ,	
Aquatic Fauna (B13)	55)				=	aphic Relief (D4)	
					AC-Neutral		
Field Observations:							
Surface Water Present?	Yes NoX	Depth (inches):	2				
Water Table Present?	Yes NoX	Depth (inches):					
Saturation Present?	Yes NoX	Depth (inches):	Wetla	ind Hydrology	Present?	Yes X	No
(includes capillary fringe)							
Describe Descrided Data (atra	an acusa manitaring wall con	ial photos, provious ir	annostiona) if available	<u> </u>			
Describe Recorded Data (site	eam gauge, monitoring well, aer	iai priotos, previous ir	ispections), ii available	₽.			
Remarks:							
1							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 05-W017-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species 75 x 1 = ___ 50% of total cover: 20% of total cover: FACW species 30 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 10 FACU species x 4 = UPL species 10 x 5 = 225 Column Totals: 125 (A) Prevalence Index = B/A = 1.8 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 10 = Total Cover X 3 - Prevalence Index ≤3.01 5 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha latifolia / Broadleaf cattail, Broad-leaved cattail OBL 2. Scirpus cyperinus / Woolgrass 30 Yes **FACW** ¹Indicators of hydric soil and wetland hydrology must 3. Andropogon virginicus / Broomsedge bluestem 10 FACU be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 115 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 23 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>05-W017-1W</u>

	iption: (Describe to th	ne depth need			or confirm	the absen	ice of indicator	s.)		
Depth (inches)	Matrix	%		Features	Tuno1	1 002	Taytura		Domorko	
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Clay Learn	Dooley rofus	Remarks	realeimed seel
0-8	5Y 4/1	98	7.5YR 5/8	2	<u> </u>	<u>M</u>	Clay Loam	Rocky refus	ai muitipie pits,	reclaimed coal
								-		
								-		
								-		
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	ation: PL=Pore	e Lining, M=Ma	trix.
Hydric Soil II	ndicators:						Indicators	s for Problem	atic Hydric So	oils³:
Histosol			Dark Surfac	ce (S7)					O) (MLRA 147)	
	ipedon (A2)			Below Surfac	e (S8) (ML	.RA 147. 1		oast Prairie R		
Black His				Surface (S9)				(MLRA 147,		
	n Sulfide (A4)			yed Matrix (F		, ,	Pi	•	Iplain Soils (F19	9)
	Layers (A5)		X Depleted M		,			(MLRA 136,		-
	ck (A10) (LRR N)			ς Surface (F6	3)		Ve	•	ark Surface (TF	-12)
	Below Dark Surface (A	A11)		ark Surface				ther (Explain i	•	,
	rk Surface (A12)	ŕ		ressions (F8					,	
	ucky Mineral (S1)			nese Masse						
(LRR N,	MLRA 147,148)		(LRR N, MI	LRA 136)						
Sandy G	leyed Matrix (S4)		Umbric Sur	face (F13) (MLRA 136	, 122)	³Indica	tors of hydrop	hytic vegetation	n and
Sandy R	edox (S5)		Piedmont F	loodplain So	oils (F19) (N	ILRA 148)	W	etland hydrolo	gy must be pre	sent.
Stripped	Matrix (S6)		Red Parent	: Material (F2	21) (MLRA	127, 147)	ur	nless disturbe	d or problemation	c.
Restrictive L	ayer (if observed):									
Type:			<u></u>							
Depth (inc	ches):						Hydric Soil P	resent?	Yes X	No
Remarks:						I				
ixemaiks.										

Project/Site:	Bright Moun	itain Solar		City/Cou	unty:	Hazard, Perry	County	Sampling Date:	05/24/2023
Applicant/Owner:		Avangri	id Renewables, I		·		tate: Kentucky	Sampling Point:	12-W001-1U
Investigator(s):	RF	RS		Section,	Township, Ran	ge:	Cit	ty of Hazard	
Landform (hillslope, terrace, e	tc):	Terrace	9	•	lief (concave, co	-	conve	x Slope	e (%): 0-5
Subregion (LRR or MLRA):		.RR N	Lat:	•	.29102167	Long:	-83.247137		
Soil Map Unit Name:	Shelocta-C	utshin-Gilpin	complex, 20 to 7	75 percent	slopes, very st	ony	NWI classification	on:	
Are climatic / hydrologic cond							_ , explain in Remark	(s.)	
Are Vegetation , So	il, or H	Hydrology	significant	ly disturbe	ed? A	re "Normal Cir	cumstances" prese	ent? Yes	X No
			naturally p	roblemati	c? (I	f needed, expl	ain any answers in	Remarks.)	
SUMMARY OF FINDIN						ns, transe	cts, important	features, etc.	
Hydrophytic Vegetation Pre		Yes	No X			•	•	·	
Hydric Soil Present?	Som:		No No	_	Is the Samp	led Area			
Wetland Hydrology Present	2	YesX	No X	_	within a We		Yes	No X	
Remarks: Terrace on hill	slope in higher o	elevation than	n wetland.	_					
HYDROLOGY									
Wetland Hydrology Indica	tore:								
Primary Indicators (minimum		ad: chack all t	hat apply)				Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	ii oi one require	ou. Crieck all t	True Aquatic	Plants (R	14)			I Cracks (B6)	two required)
High Water Table (A2)		-	Hydrogen Su	-	•			egetated Concave	Surface (B8)
Saturation (A3)		_			s on Living Root	ts (C3)		atterns (B10)	24400 (20)
Water Marks (B1)		_	Presence of	•	•	` ,	Moss Trim I		
Sediment Deposits (B2	2)	_	Recent Iron I	Reduction	in Tilled Soils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)		_	Thin Muck S	urface (C7	7)		Crayfish Bu	rrows (C8)	
Algal Mat or Crust (B4)	_	Other (Expla	in in Rema	arks)		Saturation \	/isible on Aerial Im	nagery (C9)
Iron Deposits (B5)		_	_				Stunted or S	Stressed Plants (D	11)
Inundation Visible on A	kerial Imagery (f	B7)					Geomorphic	c Position (D2)	
Water-Stained Leaves	(B9)						Shallow Aq	uitard (D3)	
Aquatic Fauna (B13)							Microtopogi	raphic Relief (D4)	
							FAC-Neutra	al Test (D5)	
Field Observations:									
Surface Water Present?	Yes	No X	Depth (inch	ies).					
Water Table Present?	Yes	No X							
Saturation Present?	Yes	No X		· —		Wetland Hvo	Irology Present?	Yes	No X
(includes capillary fringe)						,			-
(gs)									
Describe Recorded Data (s	tream gauge, m	nonitoring wel	l, aerial photos, ¡	orevious ir	nspections), if a	vailable:			
Remarks:									
Remarks:									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 12-W001-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) 30 feet % Cover Tree Stratum (Plot size: Species? Status 1. Acer rubrum / Red maple FAC **Total Number of Dominant** 2. Fraxinus americana / White ash 20 FACU 10 ____ (B) Species Across All Strata: 3. Liriodendron tulipifera / Tuliptree 20 Yes FACU Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species 0 x 1 = ___ 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 25 x 3 = FAC species 1. Fraxinus americana / White ash FACU **FACU** species 97 388 x 4 = 2. Rosa multiflora / Multiflora rose, Multiflora rosa Yes FACU UPL species 0 x 5 = 10 3. Fagus grandifolia / American beech Yes FACU Column Totals: (A) Prevalence Index = B/A = 3.8 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 35 = Total Cover 3 - Prevalence Index ≤3.01 17 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Polystichum acrostichoides / Christmas fern **FACU** 5 FACU 2. Urtica dioica / Stinging nettle ¹Indicators of hydric soil and wetland hydrology must 3. Parthenocissus quinquefolia / Virginia creeper 5 Yes FACU be present, unless disturbed or problematic. 4. Fraxinus americana / White ash Yes **FACU Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 11 20% of total cover: Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 12-W001-1U

	iption: (Describe to th	e depth neede			or confirm	the absen	ce of indicators	s.)		
Depth (inches)	Matrix	<u></u> %		r Features	Ti 1	1?	Texture		Dames	
(inches)	Color (moist)		Color (moist)		Type ¹	Loc²			Remarks	
0-8	7.5YR 4/2	98	10YR 5/6	2	<u> </u>	<u>M</u>	Silt Loam			
¹Type: C=Con	centration, D=Depletion	n, RM=Reduced	l Matrix, MS=Masł	ked Sand Gra	ins.		²Loca	tion: PL=P	ore Lining, M=Ma	atrix.
Hydric Soil Ir	dicators:						Indicators	for Proble	ematic Hydric S	oils³:
Histosol	(A1)		Dark Surfa	ce (S7)			2 0	cm Muck (A	(10) (MLRA 147	')
Histic Ep	pedon (A2)		Polyvalue I	Below Surface	e (S8) (ML	.RA 147, 14	48) Co	ast Prairie	Redox (A16)	
Black His				Surface (S9)				(MLRA 14		
	n Sulfide (A4)			yed Matrix (F		, ,	Pie	•	odplain Soils (F1	19)
	Layers (A5)		Depleted M		,			(MLRA 13		,
	ck (A10) (LRR N)			k Surface (F6	:)		Ve	-	Dark Surface (T	F12)
	Below Dark Surface (A	(11)	_	ark Surface (•			-	n in Remarks)	1 12)
	•	(11)					01	nei (Expiai	II III Remarks)	
	rk Surface (A12)			ressions (F8)						
	ucky Mineral (S1)			anese Masse	s (F12)					
•	MLRA 147,148)		(LRR N, M	•			.			
	eyed Matrix (S4)			face (F13) (ophytic vegetation	
	edox (S5)			Floodplain So					ology must be pr	
Stripped	Matrix (S6)		Red Parent	t Material (F2	1) (MLRA	127, 147)	un	less disturl	ped or problemat	tic.
Restrictive La	ayer (if observed):									
Type:										
Depth (inc	hes):						Hydric Soil P	resent?	Yes X	No
-1 (-							
Remarks:										
(Gravel refusal.									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	05/24/2023
Applicant/Owner:	Avangrid Renewab	les, LLC	State	e: Kentucky	Sampling Point:	12-W001-1W
Investigator(s):	RF RS	Section, Township	, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc.	c): Terrace/ seep	Local relief (conca	ive, convex, none):	concav	e Slope	e (%): <u>0-5</u>
Subregion (LRR or MLRA):	LRR N La	at: 37.29099783	B Long:	-83.247183	B3 Datur	m: WGS 84
Soil Map Unit Name:	Shelocta-Cutshin-Gilpin complex, 2	0 to 75 percent slopes, v	ery stony	NWI classification	on:	_
Are climatic / hydrologic conditi	ons on the site typical for this time of ye	ear? Yes X	No (If no, ex	kplain in Remark	s.)	
Are Vegetation, Soil	, or Hydrologysignif	icantly disturbed?	Are "Normal Circu	mstances" prese	ent? Yes	X No
Are Vegetation, Soil	, or Hydrologynatur	ally problematic?	(If needed, explain	any answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map showing	sampling point loc	cations, transects	s, important	features, etc.	
Hydrophytic Vegetation Pres	ent? Yes X No					
Hydric Soil Present?	Yes X No	Is the	Sampled Area			
Wetland Hydrology Present?			a Wetland?	Yes X	No	
, , , , , , , , , , , , , , , , , , , ,						
Remarks:						
Hillside seep tha	at flows off hillside and is captured and	retained by terrace.				
HYDROLOGY						
	oro:					
Wetland Hydrology Indicate				Pagandany India	otors (minimum of t	two required)
Surface Water (A1)	of one required: check all that apply)	ustic Plants (P14)			ators (minimum of t	(wo required)
X High Water Table (A2)		uatic Plants (B14) en Sulfide Odor (C1)	-		l Cracks (B6) getated Concave S	Surface (D9)
		, ,	- Doots (C2)		-	Surface (Bo)
X Saturation (A3) Water Marks (B1)	_	d Rhizospheres on Living e of Reduced Iron (C4)	(C3)	Moss Trim L	atterns (B10)	
Sediment Deposits (B2)		re of Reduced from (C4) Fron Reduction in Tilled S	'cile (C6)		, ,	
· · · · ·			oolis (CO)		Water Table (C2)	
Drift Deposits (B3)		ck Surface (C7)	-	Crayfish Bu		
Algal Mat or Crust (B4)	Other (E	Explain in Remarks)	-		/isible on Aerial Im	
Iron Deposits (B5)	wiel Imagram (DZ)		-		Stressed Plants (D1	1)
Inundation Visible on Ac			-		Position (D2)	
Water-Stained Leaves (59)		-	Shallow Aqu	, ,	
Aquatic Fauna (B13)			-		aphic Relief (D4)	
			-	X FAC-Neutra	i lest (D5)	
Field Observations:						
Surface Water Present?	Yes No X Depth	(inches):				
Water Table Present?	Yes X No Depth	(inches): 8	_			
Saturation Present?	Yes X No Depth	(inches): 4	Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)		· · · · · · · · · · · · · · · · · · ·	_			
Describe Recorded Data (str	eam gauge, monitoring well, aerial pho	tos, previous inspections	s), if available:			
Remarks:						
	lects seep runoff, tadpoles in standing	water				

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 12-W001-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 4 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: 0 = Total Cover OBL species 0 x 1 = ___ 50% of total cover: 20% of total cover: 35 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 20 x 3 = FAC species 1. Elaeagnus umbellata / Autumn olive 40 FACU species 10 x 4 = UPL species x 5 = 100 (A) 270 Column Totals: Prevalence Index = B/A = 3.18 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 20 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 10 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet Problematic Hydrophytic Vegetation¹ (Explain) Agrostis capillaris / Colonial bentgrass FAC 20 FACW 2. Aster / Aster Yes ¹Indicators of hydric soil and wetland hydrology must 3. Impatiens capensis / Spotted jewelweed 15 Yes **FACW** be present, unless disturbed or problematic. 4. Rosa multiflora / Multiflora rose, Multiflora rosa 10 FACU **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 32 20% of total cover: 13 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>12-W001-1W</u>

Depth	Matrix			K Features		the absen	ce of indicator	,		
(inches)	Color (moist)	%	Color (moist)	% realures	Type ¹	Loc²	Texture		Remark	ks.
0-6	7.5YR 2.5/1	100	Color (moist)	70	Туре	LOC	Silt Loam		Remain	13
6-18		60	10YR 5/4	15		M				
	2.5Y 4/1		10113/4	15		IVI	Clay			
6-18	2.5Y 6/1	25					Clay	-		
					· —— ·					
								-		
		. ——								
ype: C=Cor	ncentration, D=Depletion	n, RM=Redu	uced Matrix, MS=Masl	ked Sand Gr	rains.		²Loca	ition: PL=P	ore Lining, M	1=Matrix.
ydric Soil lı	ndicators:						Indicators	for Probl	ematic Hydr	ic Soils³:
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (410) (MLRA	. 147)
Histic Ep	pipedon (A2)		Polyvalue I	Below Surface	ce (S8) (ML	.RA 147, 14	18) Co	oast Prairie	Redox (A16	5)
Black His				Surface (S9)			_	(MLRA 1		
	n Sulfide (A4)			yed Matrix (,	Pi	•	odplain Soils	s (F19)
	Layers (A5)		X Depleted M		,		<u> </u>	(MLRA 1		. /
	ck (A10) (LRR N)			k Surface (F	6)		Ve	•	Dark Surfac	ce (TF12)
_	d Below Dark Surface (A11)		ark Surface (i				-	in in Remark	
_	ark Surface (A12)	,		ressions (F				or (Expla		~,
_	lucky Mineral (S1)			anese Masse						
_ ′	, ,				es (F12)					
	MLRA 147,148)		(LRR N, M		(14) DA 400	400)	21 11			
_	sleyed Matrix (S4)			rface (F13)	•	-			rophytic vege	
	edox (S5)			Floodplain S					ology must b	
Stripped	Matrix (S6)		Red Paren	t Material (F	21) (MLRA	127, 147)	ur	nless distur	bed or proble	ematic.
estrictive L	ayer (if observed):									
Type:	,									
Depth (in	ches):						Hydric Soil P	resent?	Yes X	(No
emarks:										

Project/Site:	Bright Mountain Solar	City/	/County:	Hazard, Perry Co	ounty	Sampling Date:	09/20/2022
Applicant/Owner:	Avangrid	Renewables, LLC	·	State	e: Kentucky	Sampling Point:	13-W001-1U
Investigator(s):	JB RS	Sect	tion, Township, R	ange:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	c): terrace			, convex, none):	convex	Slope	e (%): 1-6
Subregion (LRR or MLRA):	·	Lat:	37.295956	Long:	-83.278781		
Soil Map Unit Name:		point Bethesda 2-70			NWI classification		
Are climatic / hydrologic condition				i i	kplain in Remarks		
	, or Hydrology			Are "Normal Circui	•	,	X No
	, or Hydrology				•		<u> </u>
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			(If needed, explain	-	•	
SUMMARY OF FINDING	S - Attach site map sh	lowing samplin	g point locat	ions, transects	<u>s, important i</u>	teatures, etc.	
Hydrophytic Vegetation Prese	ent? Yes	No X					
Hydric Soil Present?	Yes	No X	Is the Sar	npled Area			
Wetland Hydrology Present?	Yes	No X	within a V	Vetland?	Yes	No X	
Remarks: Upland forest							
HYDROLOGY							
Wetland Hydrology Indicate	ors:						
Primary Indicators (minimum		it apply)		9	Secondary Indica	ators (minimum of t	two required)
Surface Water (A1)	and a quintant officer and the	True Aquatic Plants	s (B14)			Cracks (B6)	
High Water Table (A2)		Hydrogen Sulfide C	, ,	-		getated Concave S	Surface (B8)
Saturation (A3)		Oxidized Rhizosph		note (C3)		atterns (B10)	Juliace (Bo)
Water Marks (B1)		Presence of Reduc	_		Moss Trim L	, ,	
Sediment Deposits (B2)				- (C6)		Water Table (C2)	
	_	Recent Iron Reduc		<u> </u>		` ,	
Drift Deposits (B3)	-	Thin Muck Surface		-	Crayfish Bur	, ,	(00)
Algal Mat or Crust (B4)	_	Other (Explain in R	(emarks)	=		isible on Aerial Im	
Iron Deposits (B5)				-		Stressed Plants (D	1)
Inundation Visible on Ae	• • • •			-		Position (D2)	
Water-Stained Leaves (I	39)			-	Shallow Aqu	, ,	
Aquatic Fauna (B13)				=		aphic Relief (D4)	
				-	FAC-Neutral	l Test (D5)	
F: 11 01							
Field Observations:		5					
Surface Water Present?	Yes No X	Depth (inches):					
Water Table Present?	Yes No X	Depth (inches):					
Saturation Present?	Yes No X	Depth (inches):		Wetland Hydro	logy Present?	Yes	No X
(includes capillary fringe)							
Describe Recorded Data (stre	eam gauge, monitoring well,	aerial photos, previou	us inspections), i	f available:			
Remarks:							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W001-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: % Cover Species? Status 1. Liriodendron tulipifera / Tuliptree **FACU Total Number of Dominant** 2. Robinia pseudoacacia / Black locust 15 FACU 8 ____ (B) Species Across All Strata: 3. Acer rubrum / Red maple FAC Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species 0 x 1 = ___ 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 10 _ x 3 = FAC species 1. Quercus velutina / Black oak NI FACU species 90 360 x 4 = 10 FACU 2. Cornus florida / Flowering dogwood Yes UPL species 20 x 5 = 100 10 3. Fagus grandifolia / American beech Yes FACU 490 Column Totals: 120 (A) 4. Pinus strobus / Eastern white pine 5 **FACU** Prevalence Index = B/A = 4.08 **Hydrophytic Vegetation Indicators:** 8. 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 45 = Total Cover 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet Problematic Hydrophytic Vegetation¹ (Explain) 1. Miscanthus sinensis / Chinese silvergrass **FACU** 2. Parthenocissus quinquefolia / Virginia creeper 5 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Acer saccharum / Sugar maple FACU be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 10 20% of total cover: 4 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W001-1U

Profile Descri	ption: (Describe to th	ne depth nee	ded to document th	e indicator	or confirm	the absen	ce of indicators	s.)	-		
Depth	Matrix		Redox	Features							
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remark	KS	
0-4	10YR 2/2	100					Silt Loam				
4-18	10YR 5/4	100					Clay Loam				
¹Type: C=Con	centration, D=Depletion	n, RM=Reduc	ced Matrix, MS=Mask	ed Sand Gra	ains.	_	²Loca	tion: PL=P	ore Lining, M	1=Matrix.	_
Hydric Soil In	dicators:						Indicators	for Proble	ematic Hydr	ic Soils³:	
Histosol (A1)		Dark Surfac	ce (S7)			2 0	m Muck (A	(MLRA	147)	
Histic Epi	pedon (A2)		Polyvalue E	Below Surfac	e (S8) (ML	-RA 147, 1	48) Co	ast Prairie	Redox (A16	5)	
Black His				Surface (S9)		17, 148)		(MLRA 14			
	Sulfide (A4)			yed Matrix (F	2)		Pie		odplain Soils	s (F19)	
	Layers (A5)		Depleted M					(MLRA 13			
	ck (A10) (LRR N)			Surface (F6	•			-	Dark Surfac	, ,	
	Below Dark Surface (A	A11)		ark Surface			Ot	her (Explai	n in Remark	s)	
	k Surface (A12)			ressions (F8							
	ucky Mineral (S1)			nese Masse	s (F12)						
	MLRA 147,148) eyed Matrix (S4)		(LRR N, MI	-RA 136) face (F13) (MI DA 136	122)	3Indicat	ore of bydr	ophytic vege	station and	
Sandy Re	- , ,			lace (i 13) (loodplain Sc					opriyiic vege ology must b		
	Matrix (S6)			: Material (F2					ped or proble		
	Tutin (00)			inatorial (12	(III-III	1		- diotari	ou or proble	matio.	
	yer (if observed):										
Type:	L \.						Hardela Oction		V	NI-	V
Depth (inc	nes):						Hydric Soil Pr	esent?	Yes	No _	<u> </u>
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	09/20/2022
Applicant/Owner:	Avangrid Renewable	s, LLC	Stat	e: Kentucky	Sampling Point:	13-W001-1W
Investigator(s):	JB RS MS LL	Section, Townshi	p, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc			cave, convex, none):	concave	e Slope	e (%): 2-7
Subregion (LRR or MLRA):		: 37.2961879	9 Long:	-83.278670		• •
Soil Map Unit Name:	Matewan marobown			NWI classification		
	ons on the site typical for this time of yea	•	No X (If no, e			
		antly disturbed?	Are "Normal Circu		•	X No
	, or Hydrologynatural		(If needed, explain	•		<u>~</u>
	iS - Attach site map showing s		,	-	•	
			cations, transect	s, important	eatures, etc.	
Hydrophytic Vegetation Prese						
Hydric Soil Present?	Yes <u>X</u> No		Sampled Area			
Wetland Hydrology Present?	Yes <u>X</u> No	within	n a Wetland?	Yes X	No	_
·	s and retains overland sheet flow before	it outlets into an interr	nittent stream.			
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
Primary Indicators (minimum	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	True Aqu	atic Plants (B14)		Surface Soil	Cracks (B6)	
High Water Table (A2)	Hydroger	Sulfide Odor (C1)		Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	X Oxidized	Rhizospheres on Livin	g Roots (C3)	Drainage Pa	atterns (B10)	
Water Marks (B1)	Presence	of Reduced Iron (C4)		Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Recent In	on Reduction in Tilled	Soils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin Muc	k Surface (C7)		Crayfish Bu	rows (C8)	
Algal Mat or Crust (B4)		plain in Remarks)			isible on Aerial Im	agery (C9)
Iron Deposits (B5)	 `				Stressed Plants (D	
Inundation Visible on Ae	erial Imagery (B7)				Position (D2)	,
Water-Stained Leaves (I	• • • •			Shallow Aqu	, ,	
Aquatic Fauna (B13)	,				aphic Relief (D4)	
				X FAC-Neutra		
Field Observations:						
Surface Water Present?	Yes NoX Depth (i	nches):				
Water Table Present?	Yes No X Depth (i	nches):				
Saturation Present?	Yes NoX Depth (i	nches):	Wetland Hydro	ology Present?	Yes	No X
(includes capillary fringe)		'-	_			·
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photo	os, previous inspection	s), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W001-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) 30 feet) % Cover Species? Tree Stratum (Plot size: Status 1. Betula nigra / River birch **FACW Total Number of Dominant** 4 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: 15 = Total Cover OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 60 x 2 = Sapling/Shrub Stratum (Plot size: 15 feet 0 x 3 = 0 FAC species 1. Betula nigra / River birch 160 40 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 2.8 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 30 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 15 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Miscanthus sinensis / Chinese silvergrass FACU 15 2. Onoclea sensibilis / Sensitive fern Yes FACW ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 55 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 11 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W001-1W

	iption: (Describe to th	ne depth need			or confirm	the abse	nce of indicators	.)	
Depth	Matrix	%		Features	T = 1	12	Tandona	Daman	
(inches)	Color (moist)		Color (moist)		Type ¹	Loc²	Texture	Remark	KS
0-18	10YR 5/1	95	10YR 6/6	5	<u>C</u>	PL	Sity Clay Loam		
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Locat	ion: PL=Pore Lining, N	1=Matrix.
Hydric Soil In	ndicators:						Indicators	for Problematic Hydr	ic Soils³:
Histosol	(A1)		Dark Surfac	ce (S7)				m Muck (A10) (MLRA	
	ipedon (A2)			Below Surfac	e (S8) (ML	RA 147.		ast Prairie Redox (A16	•
Black His				Surface (S9)				(MLRA 147, 148)	,
_	n Sulfide (A4)			yed Matrix (F		.,,		dmont Floodplain Soils	s (F19)
	Layers (A5)		X Depleted M		-,			(MLRA 136, 147)	- (0)
	ck (A10) (LRR N)			Surface (F6	3)			ry Shallow Dark Surfac	ο (TF12)
	Below Dark Surface (A	\11\		ark Surface				ner (Explain in Remark	
_	rk Surface (A12)	X11)		ressions (F8			_ 0"	iei (Explain in Remaik	3)
_	ucky Mineral (S1)			nese Masse	-				
	MLRA 147,148)		(LRR N, ML		S (F12)				
•	· · · · · · · · · · · · · · · · · · ·		•	•	MI DA 426	400)	31		
	leyed Matrix (S4)			face (F13) (ors of hydrophytic vege	
	edox (S5)			loodplain Sc				tland hydrology must b	
Stripped	Matrix (S6)		Red Parent	Material (F2	21) (MLRA	127, 147) unl	ess disturbed or proble	ematic.
Restrictive I	ayer (if observed):								
Type:	ayer (ii observed).								
Depth (inc	phoc):		_				Hydric Soil Pr	ocent? Vec \	/ No
Deptii (iiit							Hydric 30ii Pi	esent? Yes <u>></u>	<u> </u>
Remarks:									

Project/Site:	Bright M	lountain Solar		City/Co	ounty:	Hazard, Perry	/ County	Sampling Date:	09/20/2022
Applicant/Owner:			grid Renew		· —		tate: Kentucky	Sampling Point:	13-W002-1U
Investigator(s):	JE	RS LL MS		Section	n, Township, Ra	inge:	Cit	y of Hazard	
Landform (hillslope, terrace,	, etc):	terra	ce		relief (concave,		concav	e Slope	e (%): 2-7
Subregion (LRR or MLRA):		LRR N			37.298504	Long:	-83.276781		
Soil Map Unit Name:		Fairpo	oint and Be	thesda soils 2-7	70%		NWI classification	on:	
Are climatic / hydrologic con	nditions on the	site typical for	this time of	year? Yes	X No	(If no	 , explain in Remark	s.)	
Are Vegetation , S	oil ,	or Hydrology	sig	nificantly disturt	ped?	Are "Normal Ci	rcumstances" prese	nt? Yes	X No
				turally problema			lain any answers in		
SUMMARY OF FINDI						ons. transe	cts. important	features. etc.	
Hydrophytic Vegetation P		Yes	No	X			<u> </u>		
Hydric Soil Present?	resent:	Yes	No		Is the Sam	nlod Aroa			
Wetland Hydrology Prese	nt?	Yes	No		within a W		Yes	No. Y	
Welland Hydrology Frese		163			within a vv		163	NoX	
Remarks:									
HYDROLOGY									
Wetland Hydrology Indi	cators:								
Primary Indicators (minim		nuired: check al	II that apply)			Secondary Indica	ators (minimum of	two required)
Surface Water (A1)		,		Aquatic Plants (B14)			Cracks (B6)	
High Water Table (A	2)			gen Sulfide Od				getated Concave	Surface (B8)
Saturation (A3)	,			zed Rhizospher		ots (C3)		atterns (B10)	,
Water Marks (B1)				nce of Reduced	•	,	Moss Trim L		
Sediment Deposits (B2)		Rece	nt Iron Reductio	n in Tilled Soils	(C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	•		Thin I	Muck Surface (0	C7)	,	Crayfish Bu	rrows (C8)	
Algal Mat or Crust (E	34)			(Explain in Rer				isible on Aerial Im	nagery (C9)
Iron Deposits (B5)	,				,			Stressed Plants (D	
Inundation Visible or	n Aerial Image	ery (B7)						Position (D2)	,
Water-Stained Leave	-						Shallow Aqu		
Aquatic Fauna (B13)								aphic Relief (D4)	
_ ` ` `							FAC-Neutra	l Test (D5)	
Field Observations									
Field Observations:	V	Nie	V D	Ale (in ale a a)					
Surface Water Present?	Yes			th (inches):					
Water Table Present?	Yes			th (inches):		W-41		V	NI- V
Saturation Present?	Yes	No	X Dep	th (inches):		vvetiand Hyd	drology Present?	Yes	No <u>X</u>
(includes capillary fringe)									
Describe Recorded Data	(stream gaug	e, monitoring w	ell, aerial p	hotos, previous	inspections), if	available:			
		,	, ,		, ,,				
Remarks:									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W002-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) 30 feet % Cover Tree Stratum (Plot size: Species? Status FAC 1. Acer rubrum / Red maple **Total Number of Dominant** 2. Oxydendrum arboreum / Sourwood 5 ____ (B) Species Across All Strata: 3. Tilia americana / American basswood 10 No FACU 4. Pinus resinosa / Red pine 10 FACU No Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover x 1 = OBL species 47 50% of total cover: 20% of total cover: 5 x 2 = FACW species Sapling/Shrub Stratum (Plot size: ___ 15 feet 70 x 3 = 210 FAC species 1. Liriodendron tulipifera / Tuliptree FACU FACU species 95 380 x 4 = 10 FACU 2. Tilia americana / American basswood Yes UPL species 25 x 5 = 10 3. Acer rubrum / Red maple Yes FAC Column Totals: 195 (A) 4. Cornus florida / Flowering dogwood 5 FACU Prevalence Index = B/A = 3.72 **Hydrophytic Vegetation Indicators:** 8. 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 35 = Total Cover 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Lycopodium / Clubmoss FACU 2. Rosa multiflora / Multiflora rose, Multiflora rosa 10 No ¹Indicators of hydric soil and wetland hydrology must 3. Smilax / Greenbrier 5 FACU No be present, unless disturbed or problematic. 4. Parthenocissus quinquefolia / Virginia creeper No **FACU** 5. Fraxinus pennsylvanica / Green ash **FACW Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. 11. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 32 20% of total cover: 13 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W002-1U

Profile Desc Depth	ription: (Describe to t Matrix	he depth ne		ne indicator x Features	or confirm	the abse	nce of indicators	s.)			
(inches)	Color (moist)	%	Color (moist)	% realures	Type ¹	Loc²	Texture		Remar	ks	
0-2	10YR 2/1	90	10YR 5/6	10	C Type	M	Sity Clay Loam		Remai	NS .	
2-18	10YR 6/4	90	10YR 2/2	10		M	Sity Clay Loam				
2-10	1011 0/4	90	1011 2/2	10		IVI	Sity Clay Loan				
					. ——						
					· ——						
	-	- ——			· ——						
					. ——						
		. ——									
					· ——						
1 . 0.0				10 10			21				
Type: C=Cor	ncentration, D=Depletion	on, RM=Redu	iced Matrix, MS=Mas	ked Sand Gr	rains.		²Loca	tion: PL=P	ore Lining, N	/I=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Probl	ematic Hydi	ric Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2 0	m Muck (/	410) (MLRA	147)	
	pipedon (A2)			Below Surfac	ce (S8) (MI	-RA 147,		-	Redox (A16	•	
	stic (A3)			Surface (S9)				(MLRA 1		,	
	n Sulfide (A4)			yed Matrix (, -,	Pie	•	oodplain Soil	s (F19)	
	Layers (A5)		Depleted N		-,		_ ``	(MLRA 1		. ()	
	ick (A10) (LRR N)			k Surface (F	:6)		Ve	-	Dark Surfac	e (TF12)	
	d Below Dark Surface (Δ11)		ark Surface				-	in in Remark		
	ark Surface (A12)	, , , , ,		pressions (F			•	nor (Expla	iii iii rtoman	.0)	
	lucky Mineral (S1)			anese Masse							
	MLRA 147,148)		(LRR N, M		53 (1 12 <i>)</i>						
	Bleyed Matrix (S4)		•	rface (F13)	/MI DA 126	122\	3Indicat	are of byd	rophytic vege	atation and	
	. , ,				•	-					
	Redox (S5)			Floodplain S					ology must b		
Suripped	Matrix (S6)		Red Paren	t Material (F.	ZI) (WLRA	4 127, 147) un	iess distur	bed or probl	emauc.	
Restrictive L	ayer (if observed):										
Type:											
Depth (in	ches):						Hydric Soil Pi	resent?	Yes	No	Χ
D							l				
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	09/20/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	13-W002-1W
Investigator(s):	RS,MS,JB,LL	Section, Township,	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	c): Terrace	Local relief (concav	/e, convex, none):	concave	e Slope	e (%): 1-6
Subregion (LRR or MLRA):	LRR N Lat:	37.298543	Long:	-83.276913	B Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe			NWI classification		
· · · · · · · · · · · · · · · · · · ·	ons on the site typical for this time of year?			xplain in Remark	s)	
	**	itly disturbed?	Are "Normal Circu	•	,	X No
Are Vegetation , Soil	, or Hydrologynaturally p		(If needed, explain	•		<u>~</u>
	iS - Attach site map showing sar		•	-	·	
			ations, transcott	s, important	eatures, etc.	
Hydrophytic Vegetation Prese		_	II A			
Hydric Soil Present?	Yes X No		ampled Area			
Wetland Hydrology Present?	Yes <u>X</u> No	within a	Wetland?	Yes X	No	
Remarks:						
Terrace capture	s and retains overland sheet flow from adja	acent hill slope.				
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
1	of one required: check all that apply)		,	Secondary Indica	tors (minimum of	two required)
X Surface Water (A1)		c Plants (B14)			Cracks (B6)	o .oquou/
X High Water Table (A2)	X Hydrogen Si	, ,	•		getated Concave	Surface (B8)
l 		nizospheres on Living	Poots (C3)	X Drainage Pa	_	Surface (Bo)
· · ·			Noois (C3)		, ,	
Water Marks (B1)		Reduced Iron (C4)	-: (00)	Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled So	ils (Cb)		Water Table (C2)	
Drift Deposits (B3)	Thin Muck S	, ,		Crayfish Bur	, ,	
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)	,	Saturation V	isible on Aerial Im	agery (C9)
Iron Deposits (B5)			ı	Stunted or S	tressed Plants (D	1)
Inundation Visible on Ae	rial Imagery (B7)		,	Geomorphic	Position (D2)	
X Water-Stained Leaves (I	89)			Shallow Aqu	itard (D3)	
Aquatic Fauna (B13)				X Microtopogra	aphic Relief (D4)	
			- -	FAC-Neutra	Test (D5)	
Field Observations:						
	Van V. Na. Danth (in al	h).				
Surface Water Present?	Yes X No Depth (inch	· —	-			
Water Table Present?	Yes X No Depth (inch		-			
Saturation Present?	Yes X No Depth (inch	hes): 0	_ Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections)	, if available:			
Remarks:						
Remarks.						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W002-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) 30 feet % Cover Tree Stratum (Plot size: Species? Status 1. Betula nigra / River birch **FACW Total Number of Dominant** 2. Acer rubrum / Red maple FAC 4 ____ (B) Species Across All Strata: 3. Liriodendron / Tuliptree NI Percent of Dominant Species That Are OBL, FACW, or FAC: _ (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover x 1 = OBL species 50% of total cover: 20% of total cover: 130 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 10 x 3 = FAC species 1. Liriodendron / Tuliptree NI 5 FACU species x 4 = Yes NI 2. Oxydendrum / Sourwood UPL species 33 x 5 = 5 3. Platanus occidentalis / American sycamore **FACW** Column Totals: 178 (A) Prevalence Index = B/A = 2.67 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 35 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 17 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: 5 feet Problematic Hydrophytic Vegetation¹ (Explain) 1. Woodwardia areolata / Netted chain fern **FACW** 2. Rosa multiflora / Multiflora rose, Multiflora rosa 5 FACU ¹Indicators of hydric soil and wetland hydrology must 3. Impatiens capensis / Spotted jewelweed 5 **FACW** be present, unless disturbed or problematic. 4. Bidens / Beggarticks **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 45 20% of total cover: 18 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W002-1W

	ription: (Describe to t	he depth nee			or confirm	the abser	nce of indicator	s.)
Depth	Matrix			Features	- ·		- .	<u>.</u>
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u> %</u>	Type ¹	Loc ²	Texture	Remarks
0-14	10YR 5/1	70	10YR 5/8	30	RM	<u>M</u>	Clay Loam	
14-18	7.5R 6/6	98	10YR 5/1	2	RM	M	Sandy Clay	
		-		-				
¹Type: C=Cor	ncentration, D=Depletic	on, RM=Redu	ced Matrix, MS=Masl	ked Sand Gr	ains.		²Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators	s for Problematic Hydric Soils³:
Histosol	(A1)		Dark Surfa	ce (S7)			2 (cm Muck (A10) (MLRA 147)
	pipedon (A2)			Below Surfac	ce (S8) (ML	RA 147. 1		oast Prairie Redox (A16)
Black Hi				Surface (S9)				(MLRA 147, 148)
	n Sulfide (A4)			yed Matrix (,,	Pi	edmont Floodplain Soils (F19)
	I Layers (A5)		X Depleted M		-,		' "	(MLRA 136, 147)
_	ick (A10) (LRR N)				·6)		\/a	ery Shallow Dark Surface (TF12)
	d Below Dark Surface (Λ11)		k Surface (F ark Surface				ther (Explain in Remarks)
		AII)					0	ther (Explain in Kemarks)
	ark Surface (A12)			ressions (F				
	lucky Mineral (S1)			anese Masse	es (F12)			
	MLRA 147,148)		(LRR N, M	•	(14) DA 400	400)	21 11	
_	sleyed Matrix (S4)			face (F13)	-			tors of hydrophytic vegetation and
	edox (S5)			Floodplain S				etland hydrology must be present.
Stripped	Matrix (S6)		Red Paren	t Material (F	21) (MLRA	127, 147) un	nless disturbed or problematic.
Restrictive I	ayer (if observed):							
	ayer (ii observeu).							
Type:	-1						Undain Cail D	Image m42 Van V Na
Depth (in	cnes):						Hydric Soil P	resent? Yes X No
Remarks:								

Project/Site:	Bright Mountain Solar	City/C	ounty:	Hazard, Perry C	ounty	Sampling Date:	09/21/2022
Applicant/Owner:	Avangrid Re	newables, LLC		State	e: Kentucky	Sampling Point:	13-W003-1U
Investigator(s):	RS,MS,JB,LL	Section	n, Township, Ra	nge:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	e): Hillslope	Local	relief (concave,	convex, none):	convex	Slop	oe (%): 40-50
Subregion (LRR or MLRA):	LRR N	Lat:	37.30308	Long:	-83.270995		
Soil Map Unit Name:	Fairpoint and Bethesda soils,	2 to 70 percent slo			NWI classification		
	ons on the site typical for this tim				xplain in Remark		
Are Vegetation , Soil		significantly distur		Are "Normal Circu	•	•	X No
	, or Hydrology			(If needed, explair	•		<u> </u>
	S - Attach site map show			•	' -	•	
Hydrophytic Vegetation Prese	ent? Yes	No X			•		
Hydric Soil Present?		No X	Is the Sam	nled Area			
Wetland Hydrology Present?		No X	within a W	=	Yes	No X	
		χ	Within a W		100	X	
Remarks: Forested upland	ı						
HYDROLOGY							
Wetland Hydrology Indicate							
	of one required: check all that a	pply)			Secondary Indica	•	f two required)
Surface Water (A1)		rue Aquatic Plants	` '	•		Cracks (B6)	
High Water Table (A2)	<u> </u>	ydrogen Sulfide Od	lor (C1)		Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	_ 0	xidized Rhizosphei	res on Living Ro	ots (C3)	Drainage Pa	itterns (B10)	
Water Marks (B1)	<u> </u>	resence of Reduce	d Iron (C4)		Moss Trim L	ines (B16)	
Sediment Deposits (B2)	R	ecent Iron Reduction	on in Tilled Soils	(C6)	Dry-Season	Water Table (C2)
Drift Deposits (B3)	т	nin Muck Surface (C7)		Crayfish Bur	rows (C8)	
Algal Mat or Crust (B4)	0	ther (Explain in Re	marks)		Saturation V	isible on Aerial I	nagery (C9)
Iron Deposits (B5)					Stunted or S	tressed Plants (I) 1)
Inundation Visible on Ae	erial Imagery (B7)				Geomorphic	Position (D2)	
Water-Stained Leaves (39)				Shallow Aqu	itard (D3)	
Aquatic Fauna (B13)					Microtopogra	aphic Relief (D4)	
				•	FAC-Neutra	Test (D5)	
Field Observations:							
Surface Water Present?	Yes No X	Depth (inches):					
Water Table Present?		Depth (inches):	_				
Saturation Present?		Depth (inches):		Wetland Hydro	Joan Procent?	Yes	No X
(includes capillary fringe)	les NO _X	Deptil (iliches).		welland riyuro	logy Fresent:	165	_ NOX
(includes capillary lillige)							
Describe Recorded Data (stre	eam gauge, monitoring well, aer	al photos, previous	inspections), if	available:			
Remarks:							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W003-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) 30 feet % Cover Tree Stratum (Plot size: Species? Status 1. Acer rubrum / Red maple FAC **Total Number of Dominant** 2. Liriodendron / Tuliptree NI 5 ____ (B) Species Across All Strata: 3. Carpinus caroliniana / American hornbeam 10 No FAC Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: 100 = Total Cover Multiply by: x 1 = OBL species 50 50% of total cover: 20% of total cover: 5 x 2 = FACW species Sapling/Shrub Stratum (Plot size: __ 15 feet 95 x 3 = FAC species 1. Carpinus caroliniana / American hornbeam FAC FACU species 10 40 x 4 = FACU 2. Carya cordiformis / Bitter-nut hickory UPL species 40 x 5 = 3. Fraxinus pennsylvanica / Green ash 5 **FACW** (A) 535 Column Totals: 150 Prevalence Index = B/A = 3.57 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 40 = Total Cover 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Polystichum acrostichoides / Christmas fern FACU 2. Lindera benzoin / Northern spicebush FAC ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 2 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W003-1U

Profile Desc Depth	ription: (Describe to t Matrix	he depth ne		ne indicator x Features	or confirm	the absen	ce of indicators	s.)			
(inches)	Color (moist)	%	Color (moist)	% realures	Type ¹	Loc²	Texture		Remar	ks	
0-9	10YR 5/3	100	Color (Illoist)	0	туре	LUC	Silt Loam		INCIIIaii	N3	
9-18	10YR 5/6	100		0	· ——		Silt Loam				
9-10	10113/0	100					Siit Loaiii				
				-	· ——						
				_							
	· -			_							
	· -			_							
Type: C=Co	ncentration, D=Depletion	on, RM=Redu	iced Matrix, MS=Mask	ked Sand G	rains.		²Loca	tion: PL=P	ore Lining, N	1=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Probl	ematic Hydı	ric Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2 (m Muck (A	10) (MLRA	147)	
	pipedon (A2)			Below Surfa	ce (S8) (M I	LRA 147. 14			Redox (A16	•	
	stic (A3)			Surface (S9)	. , .			(MLRA 1		,	
	en Sulfide (A4)			yed Matrix (,,	Pi	•	odplain Soil	s (F19)	
	d Layers (A5)		Depleted M		. –,		' '	(MLRA 1		- (· · · · ·)	
	ick (A10) (LRR N)			k Surface (F	:6)		1/0	-	Dark Surfac	۲ (TF12)	
	d Below Dark Surface (Δ11)		k Sunace (r)ark Surface				-	in in Remark		
		AII)					01	пет (Ехріа	III III Neillaik	.5)	
	ark Surface (A12)			ressions (F							
	fucky Mineral (S1)			anese Mass	es (F12)						
	MLRA 147,148)		(LRR N, M				.				
	Gleyed Matrix (S4)			rface (F13)	•				ophytic vege		
	Redox (S5)			Floodplain S					ology must b		
Stripped	Matrix (S6)		Red Paren	t Material (F	21) (MLR	A 127, 147)	un	less distur	bed or proble	ematic.	
Restrictive L	.ayer (if observed):										
Type:	, , , , , , , , , , , , , , , , , , , ,										
Depth (in	ches):						Hydric Soil P	resent?	Yes	No	Х
- - (
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	09/21/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	13-W003-1W
Investigator(s):	JB RS MS LL	Section, Township	, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): valley bottom	_	ve, convex, none):	concav	e Slope	e (%): 2-7
Subregion (LRR or MLRA):		37.303028	Long:	-83.270852		• •
Soil Map Unit Name:	fairpoint and Bethesda			NWI classification		
-	ons on the site typical for this time of year?			kplain in Remark		
		itly disturbed?	Are "Normal Circui	•	*	X No
	, or Hydrologysignifican		(If needed, explain	•		<u>~</u>
	S - Attach site map showing sa		,	-	•	
			ations, transects	s, important	eatures, etc.	
Hydrophytic Vegetation Prese		-				
Hydric Soil Present?	Yes X No		Sampled Area			
Wetland Hydrology Present?	Yes <u>X</u> No	within a	a Wetland?	Yes X	No	_
	n widens a and loses channelization, trans	itions to PEM wetland	1. stream channel resu	umes outside stu	dy area.	
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
Primary Indicators (minimum	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	True Aquati	c Plants (B14)	_	Surface Soil	Cracks (B6)	
X High Water Table (A2)	Hydrogen S	ulfide Odor (C1)	_	Sparsely Ve	getated Concave	Surface (B8)
X Saturation (A3)	Oxidized Rh	nizospheres on Living	Roots (C3)	Drainage Pa	atterns (B10)	
Water Marks (B1)	Presence of	Reduced Iron (C4)	_	Moss Trim L	.ines (B16)	
Sediment Deposits (B2)	Recent Iron	Reduction in Tilled S	oils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin Muck S	Surface (C7)	-	Crayfish Bu	rrows (C8)	
Algal Mat or Crust (B4)		ain in Remarks)	-		/isible on Aerial Im	agery (C9)
Iron Deposits (B5)	 ` ` `	,	-		Stressed Plants (D	
Inundation Visible on Ae	rial Imagery (B7)		=	X Geomorphic	,	,
Water-Stained Leaves (F			=	Shallow Aqu	, ,	
Aquatic Fauna (B13)	,		=		aphic Relief (D4)	
			-	X FAC-Neutra		
			_			
Field Observations:						
Surface Water Present?	Yes NoX Depth (inc	hes):	_			
Water Table Present?	Yes X No Depth (inc	hes): 8	_			
Saturation Present?	Yes X No Depth (inc	hes): 0	Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)			-			
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections	l), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W003-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) 30 feet) % Cover Tree Stratum (Plot size: Species? Status 1. Betula nigra / River birch **FACW Total Number of Dominant** 2. Salix / Willow **FACW** 3 (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: 15 = Total Cover Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 60 x 2 = Sapling/Shrub Stratum (Plot size: 15 feet 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 2.0 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus / Bulrush FACW 2. Carex / Sedge No FACW ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 45 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 9 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W003-1W

	ription: (Describe to the	he depth ne			or confirm	the absen	ice of indicator	rs.)
Depth	Matrix	0/		K Features	T 1	12	T4	Davis and a
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹	Loc ²	Texture	Remarks
0-10	10YR 4/1	95	10YR 5/6	5	<u>C</u>	<u>M</u>	Silty Clay	·
9-18	10YR 5/2	90	10YR 6/4	10	<u>C</u>	M	Silty Clay	
				_				
				_			·	
					· .			
	-							
¹Type: C=Cor	ncentration, D=Depletio	n, RM=Redu	ced Matrix, MS=Mask	ked Sand Gr	rains.		²Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators	s for Problematic Hydric Soils³:
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)			Below Surfac	ce (S8) (ML	RA 147. 1		oast Prairie Redox (A16)
	istic (A3)			Surface (S9)				(MLRA 147, 148)
_	en Sulfide (A4)			yed Matrix (,,	Pi	iedmont Floodplain Soils (F19)
	d Layers (A5)		X Depleted M		· –,		' '	(MLRA 136, 147)
_	uck (A10) (LRR N)			k Surface (F	:6)		1/6	ery Shallow Dark Surface (TF12)
		A 11\		ark Surface (F				ther (Explain in Remarks)
_	d Below Dark Surface (A	A11)						iller (Explain in Remarks)
_	ark Surface (A12)			ressions (F				
	Mucky Mineral (S1)			anese Masse	es (F12)			
	, MLRA 147,148)		(LRR N, M	-			<u>.</u>	
	Gleyed Matrix (S4)			rface (F13)	•			tors of hydrophytic vegetation and
	Redox (S5)			Floodplain S				etland hydrology must be present.
Stripped	l Matrix (S6)		Red Paren	t Material (F.	21) (MLRA	127, 147)	ur	nless disturbed or problematic.
Dootriotivo I	aver (if absorred):							
	_ayer (if observed):							
Type:	1 \							
Depth (in	icnes):						Hydric Soil P	Present? Yes X No
Remarks:								
· tomanto								

Project/Site:	Bright Mountain Solar	City/Cour	nty: Hazard, Perry	y County	Sampling Date:	09/21/2022
Applicant/Owner:	Avangrid Rene	wables, LLC	S	tate: Kentucky	Sampling Point:	13-W004-1U
Investigator(s):	RS,MS,JB,LL	Section,	Township, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	c): Hillslope	Local reli	ef (concave, convex, none):	convex	Slope	e (%): 40-50
Subregion (LRR or MLRA):	LRR N	Lat: 37.3	30404538 Long:	-83.2698735	56 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2			NWI classification		
	ons on the site typical for this time			 , explain in Remark		
		ignificantly disturbed		rcumstances" prese	,	X No
	, or Hydrologyn			lain any answers in		<u> </u>
	S - Attach site map showi			-	•	
Hydrophytic Vegetation Prese	ent? Yes No	, X				
Hydric Soil Present?	Yes No		Is the Sampled Area			
Wetland Hydrology Present?		$\frac{x}{x}$	within a Wetland?	Yes	No X	
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
Primary Indicators (minimum	of one required: check all that app	ly)		Secondary Indica	ators (minimum of t	two required)
Surface Water (A1)	True	Aquatic Plants (B1	4)	Surface Soil	Cracks (B6)	
High Water Table (A2)	— Hyd	rogen Sulfide Odor	(C1)	Sparsely Ve	getated Concave S	Surface (B8)
Saturation (A3)	Oxio	dized Rhizospheres	on Living Roots (C3)	Drainage Pa	atterns (B10)	
Water Marks (B1)	Pres	sence of Reduced Ir	on (C4)	Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Rec	ent Iron Reduction i	n Tilled Soils (C6)		Water Table (C2)	
Drift Deposits (B3)		Muck Surface (C7)	, ,	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		er (Explain in Rema			/isible on Aerial Im	agery (C9)
Iron Deposits (B5)	-	` '	,		Stressed Plants (D	, ,
Inundation Visible on Ae	erial Imagery (B7)				Position (D2)	,
Water-Stained Leaves (• • • •			Shallow Aqu		
Aquatic Fauna (B13)	,				aphic Relief (D4)	
				FAC-Neutra		
Field Observations:						
Surface Water Present?	Yes No _X De	epth (inches):				
Water Table Present?	Yes No _X De	epth (inches):				
Saturation Present?	Yes NoX De	epth (inches):	Wetland Hyd	drology Present?	Yes	No X
(includes capillary fringe)						
Describe Recorded Data (str	eam gauge, monitoring well, aerial	photos, previous ins	spections), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W004-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) 30 feet % Cover Tree Stratum (Plot size: Species? Status **FACU** 1. Quercus alba / White oak **Total Number of Dominant** 2. Liriodendron tulipifera / Tuliptree FACU 8 ____ (B) Species Across All Strata: 3. Acer rubrum / Red maple 10 No FAC 4. Pinus resinosa / Red pine 10 FACU No Percent of Dominant Species That Are OBL, FACW, or FAC: _ (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species 0 x 1 = ___ 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 50 x 3 = 150 FAC species 1. Acer rubrum / Red maple FAC 85 340 FACU species x 4 = FACU 2. Fagus grandifolia / American beech UPL species 0 x 5 = 3. Carpinus caroliniana / American hornbeam 5 FAC Column Totals: 135 (A) Prevalence Index = B/A = 3.63 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 60 = Total Cover 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Parthenocissus quinquefolia / Virginia creeper **FACU** FACU 2. Fagus grandifolia / American beech Yes ¹Indicators of hydric soil and wetland hydrology must 3. Acer rubrum / Red maple 5 Yes FAC be present, unless disturbed or problematic. 4. Rosa multiflora / Multiflora rose, Multiflora rosa Yes **FACU Definitions of Four Vegetation Strata** 7. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 10 20% of total cover: Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W004-1U

Profile Desc Depth	ription: (Describe to t Matrix	he depth ne		ne indicator < Features	or confirm	the absen	ce of indicators	s.)			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remar	ks	
0-2	10YR 3/2	100	Color (moist)	0	Турс		Silt Loam		rtoman	NO.	
2-18	10YR 6/6	100		0			Silt Loam				
2-10	10111 0/0	100					Ont Loan				
					· ——						
		·									
					· ——						
		. ——	-								
¹ Type: C=Cor	ncentration, D=Depletion	on, RM=Redu	iced Matrix, MS=Masl	ked Sand Gi	rains.		²Loca	tion: PL=P	ore Lining, N	1=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Probl	ematic Hydi	ric Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2 (m Muck (A	110) (MLRA	147)	
	pipedon (A2)			Below Surfa	ce (S8) (M I	LRA 147. 14			Redox (A16	-	
Black Hi				Surface (S9)	. , .			(MLRA 1		,	
	n Sulfide (A4)			yed Matrix (,,	Pi	•	odplain Soil	s (F19)	
	I Layers (A5)		Depleted M		. –,		' '	(MLRA 1		- (· · · · ·)	
	ick (A10) (LRR N)			k Surface (F	:6)		1/0	-	Dark Surfac	۲ (TF12)	
	d Below Dark Surface (Λ11\		k Sunace (r ark Surface				-	in in Remark		
		AII)					01	пет (Ехріа	III III Neillaik	.5)	
	ark Surface (A12)			ressions (F							
	lucky Mineral (S1)			anese Mass	es (F12)						
	MLRA 147,148)		(LRR N, M		/MI DA 400	. 400)	21 11 (
	leyed Matrix (S4)			face (F13)	•				ophytic vege		
	edox (S5)			Floodplain S					ology must b		
Stripped	Matrix (S6)		Red Paren	t Material (F	21) (MLR	A 127, 147)	un	less distur	bed or proble	ematic.	
Restrictive L	ayer (if observed):										
Type:	, , , , , , , , , , , , , , , , , , , ,										
Depth (in	ches):						Hydric Soil P	resent?	Yes	No	Х
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	09/21/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	13-W004-1W
Investigator(s):	MS,RS	Section, Township,	, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Floodplain		ve, convex, none):	concave	e Slope	e (%): 3
Subregion (LRR or MLRA):	<u> </u>	37.303953	Long:	-83.26966		• •
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 p			NWI classification		4SBC
	ons on the site typical for this time of year			xplain in Remark		
, ,	••	ntly disturbed?	Are "Normal Circu	•	,	X No
Are Vegetation, Soil Are Vegetation, Soil	, or Hydrologysignifican	-	(If needed, explain	•		<u> </u>
			,	-	·	
SUMMARY OF FINDING	S - Attach site map showing sa	mpling point loc	ations, transects	s, important i	reatures, etc.	
Hydrophytic Vegetation Prese	ent? Yes X No					
Hydric Soil Present?	Yes <u>X</u> No	Is the S	Sampled Area			
Wetland Hydrology Present?	Yes X No		a Wetland?	Yes X	No	
	odplain to a freshwater stream.					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
Primary Indicators (minimum	of one required: check all that apply)		;	Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	True Aquat	ic Plants (B14)		Surface Soil	Cracks (B6)	
X High Water Table (A2)	Hydrogen S	Sulfide Odor (C1)	•	Sparsely Ve	getated Concave	Surface (B8)
X Saturation (A3)		hizospheres on Living	Roots (C3)		atterns (B10)	,
Water Marks (B1)	· · · · · · · · · · · · · · · · · · ·	f Reduced Iron (C4)		Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled So	oils (C6)		Water Table (C2)	
Drift Deposits (B3)		Surface (C7)	(00)	Crayfish Bur	, ,	
Algal Mat or Crust (B4)		ain in Remarks)	•		isible on Aerial Im	agery (C9)
Iron Deposits (B5)	Other (Expi	alli ili Nelliaiks)	•		Stressed Plants (D	
Inundation Visible on Ae	rial Imagany (P7)		•		Position (D2)	1)
	• • • •					
Water-Stained Leaves (E	19)			Shallow Aqu		
Aquatic Fauna (B13)			•		aphic Relief (D4)	
			•	X FAC-Neutra	l Test (D5)	
Field Observations:						
Surface Water Present?	Yes No X Depth (inc	ches).				
Water Table Present?	Yes X No Depth (inc	· -	-			
Saturation Present?			 Wetland Hydro 	logy Procent?	Voc. V	No
	Yes X No Depth (inc	nes). U	- Welland Hydro	logy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos	, previous inspections), if available:			
`			,,			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W004-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: 0 = Total Cover OBL species 18 x 1 = ___ 50% of total cover: 20% of total cover: 55 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 10 _ x 3 = FAC species 1. Salix / Willow 0 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.9 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 5 = Total Cover X 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) Onoclea sensibilis / Sensitive fern **FACW** Yes 2. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai No OBL ¹Indicators of hydric soil and wetland hydrology must 3. Dichanthelium clandestinum / Deer-tongue rosette grass 10 No FAC be present, unless disturbed or problematic. 4. Impatiens capensis / Spotted jewelweed 10 No **FACW** 5. Persicaria sagittata / Arrow-leaf tearthumb 3 No OBL **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 78 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 39 20% of total cover: 16 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>13-W004-1W</u>

Profile Descr Depth	ription: (Describe to the Matrix	he depth nee		ne indicator	or confirm	the absen	ce of indicator	rs.)			
(inches)	Color (moist)	%	Color (moist)	% realures	Type ¹	Loc²	Texture		Remark	s	
0-18	5Y 4/2	98	10YR 3/4	2	Турс	M	Sand		rtemant	.5	
				-	· —— ·	-					
					·						
				_							
		- DM Dada	and Matrice MO. Marel				21	- ti Di	Linin - N	NA - 4-t-	
ype: C=Con	centration, D=Depletio	n, RIVI=Redu	ced Matrix, MS=Masi	ked Sand Gr	rains.		-LOC	ation: PL=P	ore Lining, M	=iviatrix.	
lydric Soil Ir	ndicators:						Indicator	s for Probl	ematic Hydri	c Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A10) (MLRA	147)	
Histic Ep	ipedon (A2)		Polyvalue l	Below Surfac	ce (S8) (ML	-RA 147, 14	48) C	oast Prairie	Redox (A16))	
Black His	stic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 1	47, 148)		
Hydroge	n Sulfide (A4)			yed Matrix (F2)		P	iedmont Flo	oodplain Soils	(F19)	
	Layers (A5)		Depleted M					(MLRA 1			
	ck (A10) (LRR N)			k Surface (F				-	Dark Surface		
	Below Dark Surface (A11)		ark Surface			<u> </u>	ther (Expla	in in Remarks	s)	
	rk Surface (A12)			ressions (F	•						
_	ucky Mineral (S1)			anese Masse	es (F12)						
•	MLRA 147,148)		(LRR N, M	-							
	leyed Matrix (S4)			rface (F13)	•				rophytic vege		
	edox (S5)			Floodplain S					ology must be		
Stripped	Matrix (S6)		Red Paren	t Material (F	21) (MLRA	127, 147)	u	nless distur	bed or proble	matic.	
Restrictive L	ayer (if observed):										
Type:											
Depth (inc	ches):		<u></u>				Hydric Soil F	Present?	Yes X	No	
Remarks:											
Ciliaiks.											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	09/21/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	13-W005-1U
Investigator(s):	JB RS LL MS	Section, Township	, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): foot of slope	Local relief (conca	ave, convex, none):	convex	Slope	e (%): 3-10
Subregion (LRR or MLRA):		37.291585	Long:	-83.235723	B Datur	m: WGS 84
Soil Map Unit Name:	Udorthents-Urban land complex	0 to 15 percent slop	es	NWI classification	on:	
	ons on the site typical for this time of year?			xplain in Remark	s.)	
Are Vegetation X , Soil		ntly disturbed?	Are "Normal Circu	•	•	X No
	, or Hydrology naturally	-	(If needed, explain	•		
	S - Attach site map showing sa			=	•	
Hydrophytic Vegetation Prese	ent? Yes No X					
Hydric Soil Present?	Yes No X	Is the	Sampled Area			
Wetland Hydrology Present?	Yes No X		a Wetland?	Yes	No X	
Remarks: Data taken adjad	cent to roadside.					
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
Primary Indicators (minimum	of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)
Surface Water (A1)	True Aquati	c Plants (B14)		Surface Soil	Cracks (B6)	
High Water Table (A2)	Hydrogen S	Sulfide Odor (C1)	•	Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	Oxidized RI	nizospheres on Living	Roots (C3)	Drainage Pa	itterns (B10)	
Water Marks (B1)	Presence o	f Reduced Iron (C4)	•	Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Recent Iron	Reduction in Tilled S	soils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin Muck	Surface (C7)	•	Crayfish Bu	rows (C8)	
Algal Mat or Crust (B4)	Other (Expl	ain in Remarks)	•	Saturation V	isible on Aerial Im	agery (C9)
Iron Deposits (B5)	<u> </u>		•	Stunted or S	Stressed Plants (D	1)
Inundation Visible on Ae	rial Imagery (B7)		•	Geomorphic	Position (D2)	
Water-Stained Leaves (E	39)		•	Shallow Aqu	itard (D3)	
Aquatic Fauna (B13)			•	Microtopogr	aphic Relief (D4)	
—			•	FAC-Neutra	Test (D5)	
Field Observations:						
Surface Water Present?	Yes No X Depth (inc	hoo):				
Water Table Present?	Yes No X Depth (inc	,	-			
Saturation Present?	Yes No X Depth (inc		Wetland Hydro	Joan Procent?	Yes	No X
(includes capillary fringe)	resNo _XDeptil (inc		_ Welland Hydro	nogy Fresent?	162	No <u>X</u>
(includes capillary inlige)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections	i), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W005-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 feet 0 _ x 3 = FAC species 45 FACU species x 4 = UPL species x 5 = Column Totals: 70 (A) Prevalence Index = B/A = 4.36 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Lespedeza cuneata / Chinese bush-clover **FACU** 25 2. Plantago lanceolata / Ribwort, English plantain Yes UPL ¹Indicators of hydric soil and wetland hydrology must 3. Miscanthus sinensis / Chinese silvergrass 5 FACU be present, unless disturbed or problematic. 4. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 35 20% of total cover: 14 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13-W005-1U

	ription: (Describe to the	he depth need			or confirm	the absen	ce of indicator	s.)		
Depth (inches)	Matrix Color (moist)	0/		Features	Trans of	12	To. 4		Domeste	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-3	10YR 5/3	100					Silt			
		· 		- ——				-		
								-		
		· 		- ——				-		
	-	· —— -		. ——						
¹Type: C=Cor	centration, D=Depletion	n, RM=Reduc	ed Matrix, MS=Mask	ked Sand Gr	ains.		²Loca	ntion: PL=P	ore Lining, M=Matrix.	
Hydric Soil II	<u> </u>	,	•						ematic Hydric Soils³:	
-			Dank Confa	(07)						
Histosol	• •		Dark Surfa		- (00) (84)	DA 447 4		•	A10) (MLRA 147)	
_	ipedon (A2)			Below Surfac			— C		Redox (A16)	
Black His				Surface (S9)		7, 148)	Б.	(MLRA 14	•	
	n Sulfide (A4)			yed Matrix (F	-2)		<u> </u>		oodplain Soils (F19)	
_	Layers (A5)		Depleted M					(MLRA 1	•	
	ck (A10) (LRR N)			k Surface (F				-	Dark Surface (TF12)	
	Below Dark Surface (A11)		ark Surface			<u> </u>	ther (Explai	in in Remarks)	
	rk Surface (A12)			ressions (F8						
	lucky Mineral (S1)			anese Masse	es (F12)					
(LRR N,	MLRA 147,148)		(LRR N, M	•						
_	leyed Matrix (S4)			face (F13)					ophytic vegetation and	
Sandy R	edox (S5)		Piedmont F	Floodplain So	oils (F19) (N	ILRA 148)	We	etland hydr	ology must be present.	
Stripped	Matrix (S6)		Red Parent	t Material (F2	21) (MLRA	127, 147)	ur	nless distur	bed or problematic.	
5	(16.1					T				
	ayer (if observed):									
Type:									.,	.,
Depth (in	ches):						Hydric Soil P	resent?	Yes No	<u>X</u>
Remarks:										
	Gravel refusal.									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	09/21/2022
Applicant/Owner:	Avangrid Renewables,	, LLC	State	: Kentucky	Sampling Point:	13-W005-W1
Investigator(s):	JB RS	Section, Township,	, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, et	tc): roadside ditch	Local relief (conca	ve, convex, none):	convex	Slope	e (%): <u>3</u>
Subregion (LRR or MLRA):	LRR N Lat:	37.291506	Long:	-83.23577	Datur	m: WGS 84
Soil Map Unit Name:	Udorthents-Urban land complex	, 0 to 15 percent slope	es	NWI classification	on:	
Are climatic / hydrologic condit	tions on the site typical for this time of year'	? Yes X	No (If no, ex	plain in Remark	s.)	
Are Vegetation, Soil	, or Hydrologysignificar	ntly disturbed?	Are "Normal Circur	nstances" prese	nt? Yes	X No
Are Vegetation, Soil	, or Hydrology X naturally	problematic?	(If needed, explain	any answers in	Remarks.)	
SUMMARY OF FINDING	GS - Attach site map showing sa	mpling point loc	ations, transects	i, important	features, etc.	
Hydrophytic Vegetation Pres	sent? Yes X No					
Hydric Soil Present?	Yes X No	— Is the S	Sampled Area			
Wetland Hydrology Present			a Wetland?	Yes X	No	
Remarks: Water source r	may be water main line located along the ro	ad side				
HYDROLOGY						
Wetland Hydrology Indicat			c	Pagandan, India,	stara (minimum af t	ture required)
Surface Water (A1)	n of one required: check all that apply)	ic Plants (B14)			ators (minimum of t Cracks (B6)	.wo required)
X High Water Table (A2)		Sulfide Odor (C1)	=		getated Concave S	Surface (B8)
X Saturation (A3)		hizospheres on Living	Roots (C3)		atterns (B10)	Juliace (DO)
Water Marks (B1)		of Reduced Iron (C4)	_	Moss Trim L	` ,	
Sediment Deposits (B2		Reduction in Tilled S	oils (C6)		Water Table (C2)	
Drift Deposits (B3)		Surface (C7)	_	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		lain in Remarks)	_		isible on Aerial Im	agery (C9)
Iron Deposits (B5)			<u>-</u>		Stressed Plants (D	
Inundation Visible on A	erial Imagery (B7)		_	Geomorphic	Position (D2)	
Water-Stained Leaves	(B9)		-	Shallow Aqu	uitard (D3)	
Aquatic Fauna (B13)			_	Microtopogr	aphic Relief (D4)	
			=	X FAC-Neutra	l Test (D5)	
Field Observations:						
Surface Water Present?	Yes No X Depth (inc	thes):				
Water Table Present?	Yes X No Depth (inc		-			
Saturation Present?	Yes X No Depth (inc	· -	 Wetland Hydrol 	logy Present?	Yes X	No
(includes capillary fringe)			-	3,		
Describe Recorded Data (st	ream gauge, monitoring well, aerial photos	, previous inspections), if available:			
		_	_			
Remarks:						
Water pipeline	likely source of hydrology.					

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 13-W005-W1 **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 1 ___ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 70 x 1 = ___ 50% of total cover: 20% of total cover: FACW species 10 x 2 = Sapling/Shrub Stratum (Plot size: 15 feet 10 x 3 = FAC species 0 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.33 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Carex lurida / Shallow sedge OBL Yes 10 No FAC 2. Equisetum arvense / Common horsetail ¹Indicators of hydric soil and wetland hydrology must 3. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai 5 No OBL be present, unless disturbed or problematic. 4. Juncus effusus / Common bog rush, Soft or lamp rush No **FACW** 5. Cyperus esculentus / Nut grass No FACW **Definitions of Four Vegetation Strata** 6. Sium suave / Hemlock water parsnip OBL Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 90 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 45 20% of total cover: <u>18</u> 50% of total cover: Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>13-W005-W1</u>

Depth	Matrix	io dopin no		Features	or commi	the absent	ce of indicators	s. <i>)</i>		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remarks	
0-18	2.5Y 4/2	95	10YR 4/6	5	С	M	Silt Loam		Romano	
	-									
							_			
				· 						
Гуре: C=Cor	centration, D=Depletio	n, RM=Redu	ced Matrix, MS=Masł	red Sand Gra	ains.		²Loca	tion: PL=P	ore Lining, M=	Matrix.
lydric Soil II	ndicators:						Indicators	for Proble	ematic Hydric	Soils ³ :
Histosol	(A1)		Dark Surfa	ce (S7)			2 0	cm Muck (A	(10) (MLRA 1	47)
Histic Ep	ipedon (A2)		Polyvalue B	Below Surfac	e (S8) (ML	.RA 147, 14	8) Co	ast Prairie	Redox (A16)	
Black His	stic (A3)		Thin Dark S	Surface (S9)	(MLRA 14	7, 148)		(MLRA 14	17, 148)	
Hydroge	n Sulfide (A4)		Loamy Gle	yed Matrix (F	2)		Pi	edmont Flo	odplain Soils (F19)
Stratified	Layers (A5)		X Depleted M	latrix (F3)				(MLRA 1	36, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dar	k Surface (F	3)		Ve	ry Shallow	Dark Surface	(TF12)
Depleted	Below Dark Surface (A11)	Depleted D	ark Surface	(F7)		Ot	her (Explai	n in Remarks)	
Thick Da	rk Surface (A12)		Redox Dep	ressions (F8)					
_	ucky Mineral (S1)			nese Masse	s (F12)					
(LRR N,	MLRA 147,148)		(LRR N, M	•						
	leyed Matrix (S4)			face (F13) (ophytic vegeta	
	edox (S5)			loodplain Sc			We	etland hydr	ology must be	present.
Stripped	Matrix (S6)		Red Paren	t Material (F2	(MLRA	127, 147)	un	less distur	oed or problem	atic.
Restrictive L	ayer (if observed):									
Type:	, , , , , , , , , , , , , , , , , , , ,									
Depth (inc	ches):						Hydric Soil P	resent?	Yes X	No
	-									
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	04/14/2022
Applicant/Owner:	Avangrid Renewa	bles, LLC	State	: Kentucky	Sampling Point:	14-W011-1W
Investigator(s):	CM, RMS, JK	Section, Township	o, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Bowl shaped depression	Local relief (conca	ave, convex, none):	concav	e Slope	e (%): <u>2-8</u>
Subregion (LRR or MLRA):	LRR N L	at: 37.2905668	Long:	-83.302364	67 Datum	n: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to	70 percent slopes, bench	ed, stony	NWI classification	on:	
Are climatic / hydrologic condition	ons on the site typical for this time of	year? Yes X	No (If no, ex	plain in Remark	s.)	
Are Vegetation X, Soil	X , or Hydrology sign	ificantly disturbed?	Are "Normal Circur	nstances" prese	ent? Yes	X No
Are Vegetation, Soil	X , or Hydrologynatu	rally problematic?	(If needed, explain	any answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map showing	sampling point lo	cations, transects	, important	features, etc.	
Hydrophytic Vegetation Prese	ent? Yes X No					
Hydric Soil Present?	Yes X No	ls the	Sampled Area			
Wetland Hydrology Present?	Yes X No		a Wetland?	Yes X	No	
		-				
Remarks:	mine grouply soils recently mound					
Reciainled coal	mine, gravely soils, recently mowed					
HYDROLOGY						
Wetland Hydrology Indicato	are:					
1	of one required: check all that apply)		S	Secondary Indica	ators (minimum of t	two required)
X Surface Water (A1)		quatic Plants (B14)			Cracks (B6)	.wo required)
X High Water Table (A2)		gen Sulfide Odor (C1)	-		getated Concave S	Surface (B8)
Saturation (A3)		ed Rhizospheres on Living	n Roots (C3)		atterns (B10)	5411400 (D0)
Water Marks (B1)		ice of Reduced Iron (C4)	_	Moss Trim L	, ,	
Sediment Deposits (B2)		t Iron Reduction in Tilled S	Soils (C6)		Water Table (C2)	
Drift Deposits (B3)		uck Surface (C7)	_	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		Explain in Remarks)	-		/isible on Aerial Ima	agery (C9)
Iron Deposits (B5)		Explain in Nomarko)	_		Stressed Plants (D1	
Inundation Visible on Ae	rial Imagery (B7)		_		Position (D2)	')
Water-Stained Leaves (E	5 , ,		_	Shallow Aqu	, ,	
Aquatic Fauna (B13)	,		_		aphic Relief (D4)	
			-	FAC-Neutra		
			-			
Field Observations:						
Surface Water Present?	Yes X No Depti	n (inches): 4	_			
Water Table Present?	Yes X No Depti	n (inches): 8	_			
Saturation Present?	Yes X No Depti	n (inches): 8	Wetland Hydrol	ogy Present?	Yes X	No
(includes capillary fringe)						
Describe Descrided Data (stre	an gauge monitoring well corial ph	ataa nraviaya inanastian) if available:			
Describe Recorded Data (site	eam gauge, monitoring well, aerial ph	otos, previous inspections	s), ii avaliable.			
Remarks:						
Rain						
i						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 14-W011-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 60 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 2 FACU species x 4 = UPL species 40 x 5 = 102 328 Column Totals: (A) Prevalence Index = B/A = 3.22 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 _ = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Scirpus cyperinus / Woolgrass FACW 40 Yes NI 2. Carex / Sedge ¹Indicators of hydric soil and wetland hydrology must 3. Trifolium pratense / Red clover FACU be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 102 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 14-W011-1W

	ription: (Describe to t	he depth ne			or confirm	the abser	nce of indicator	s.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	K Features %	Type ¹	Loc²	Texture	Remarks
0-4	10YR 4/2	90	10YR 5/8	10	С	M	Clay Loam	Reclaimed coal mine
4-18	5Y 6/1	80	7.5YR 5/8	20		M	Clay Loam	reclaimed coal milite
1 -10	51 0/1	- 00	7.511(5/6			IVI	Olay Loani	
				-				
				-				
¹Type: C=Cor	ncentration, D=Depletion	on, RM=Redu	uced Matrix, MS=Masl	ked Sand Gr	ains.		²Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators	s for Problematic Hydric Soils³:
Histosol			Dark Surfa	ce (S7)				cm Muck (A10) (MLRA 147)
	oipedon (A2)			Below Surfac	ce (S8) (M I	RA 147. 1		past Prairie Redox (A16)
Black Hi				Surface (S9)	. , .			(MLRA 147, 148)
	n Sulfide (A4)			yed Matrix (,,	Pi	edmont Floodplain Soils (F19)
	I Layers (A5)		X Depleted M		-,			(MLRA 136, 147)
	ck (A10) (LRR N)			k Surface (F	6)		V	ery Shallow Dark Surface (TF12)
	d Below Dark Surface (A11)		ark Surface				ther (Explain in Remarks)
	ark Surface (A12)	, ,		ressions (F				and (Explain in Nomanie)
	lucky Mineral (S1)			anese Masse				
	MLRA 147,148)		(LRR N, M		, <u></u>			
	eleyed Matrix (S4)			rface (F13)	(MLRA 136	. 122)	³Indica	tors of hydrophytic vegetation and
	edox (S5)			Floodplain S	•	-		etland hydrology must be present.
	Matrix (S6)			t Material (F.				nless disturbed or problematic.
	mank (00)			t material (i		, ,		noo diotarboa di problematic.
Restrictive L	ayer (if observed):							
Restrictive L	ayer (if observed):							
			<u> </u>				Hydric Soil P	resent? Yes X No
Type: Depth (in			<u></u>				Hydric Soil P	resent? Yes X No
Type:			_				Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No
Type: Depth (in							Hydric Soil P	resent? Yes X No

Project/Site:	Bright Moun	itain Solar		City/Co	ounty:	Hazard, Perry	/ County	Sampling Date:	04/14/2022
Applicant/Owner:			d Renewab		· 		tate: Kentucky	Sampling Point:	14-W013-1U
Investigator(s):	JK CS	SRMS		Section	n, Township, Rar	nge:	Cit	ty of Hazard	
Landform (hillslope, terrace, et	c):	Terrace	1		elief (concave, c		concav	e Slope	e (%): 2-4
Subregion (LRR or MLRA):		.RR N	L	at:	37.297072	Long:	-83.293251	83 Datu	m: WGS 84
Soil Map Unit Name:	Fairpoint a	nd Bethesda	soils, 2 to 7	0 percent slop	pes, benched, st	ony	NWI classification	on:	
Are climatic / hydrologic conditi	ons on the site	e typical for th	is time of y	ear? Yes	X No	(If no	, explain in Remark	s.)	
Are Vegetation X, Soil	X, or H	Hydrology	signi	icantly disturb	ped?	Are "Normal Cir	rcumstances" prese	ent? Yes	X No
Are Vegetation, Soil	, or H	Hydrology	natur	ally problema	tic? (If needed, expl	lain any answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach	site map s	showing	sampling	point location	ons, transec	cts, important	features, etc.	
Hydrophytic Vegetation Pres	ent?	Yes	No	Х					
Hydric Soil Present?		Yes	No _	X	Is the Samp	oled Area			
Wetland Hydrology Present?		Yes	No	Χ	within a We		Yes	No X	<u></u>
Remarks:									
HYDROLOGY									
Wetland Hydrology Indicat	ors:								
Primary Indicators (minimum		ed: check all ti	hat apply)				Secondary Indica	ators (minimum of	two required)
Surface Water (A1)			,	uatic Plants (I	B14)			l Cracks (B6)	
High Water Table (A2)			Hydrog	en Sulfide Odo	or (C1)		Sparsely Ve	egetated Concave	Surface (B8)
Saturation (A3)		_	_		es on Living Roo	ts (C3)	Drainage Pa	atterns (B10)	
Water Marks (B1)			Present	e of Reduced	l Iron (C4)		Moss Trim I	_ines (B16)	
Sediment Deposits (B2)	1	_	Recent	Iron Reduction	n in Tilled Soils ((C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)			Thin Mu	ck Surface (C	27)		Crayfish Bu		
Algal Mat or Crust (B4)		_	Other (F	Explain in Ren	narks)		Saturation \	/isible on Aerial Im	nagery (C9)
Iron Deposits (B5)								Stressed Plants (D	1)
Inundation Visible on A		B7)						Position (D2)	
Water-Stained Leaves (B9)						Shallow Aq	, ,	
Aquatic Fauna (B13)								raphic Relief (D4)	
							FAC-Neutra	ıl Test (D5)	
Field Observations:									
Surface Water Present?	Yes	No X	Depth	(inches):					
Water Table Present?	Yes	No X		(inches):					
Saturation Present?	Yes	No X	Depth	(inches):		Wetland Hyd	drology Present?	Yes	No X
(includes capillary fringe)									
Describe Recorded Data (str	eam gauge, m	nonitoring well	, aerial pho	tos, previous	inspections), if a	vailable:			
Remarks:									
I									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 14-W013-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 3 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 132 FACU species x 4 = 528 UPL species 30 x 5 = 150 678 Column Totals: 162 (A) Prevalence Index = B/A = 4.19 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem FACU 2. Lotus corniculatus / Bird's foot trefoil, Bird's-foot trefoil 35 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Trifolium pratense / Red clover 35 Yes FACU be present, unless disturbed or problematic. 4. Aster / Aster 30 No NI 5. Cirsium vulgare / Bullthistle, Bull thistle No FACU **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 162 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 81 20% of total cover: 32 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 14-W013-1U

Profile Descri	ption: (Describe to th	e depth need	ed to document th	e indicator	or confirm	the abser	nce of indicators	s.)			
Depth	Matrix			Features			- .				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remark	S	
0-10	5Y 4/1	100					Sity Clay Loam				
				· ——							
¹Type: C=Cond	centration, D=Depletion	n, RM=Reduce	d Matrix, MS=Mask	ed Sand Gra	ains.		²Loca ¹	tion: PL=Po	ore Lining, M	=Matrix.	
Hydric Soil In	dicators:						Indicators	for Proble	ematic Hydri	c Soils³:	
Histosol (A1)		Dark Surfac	ce (S7)			2 c	m Muck (A	10) (MLRA	147)	
Histic Epi	pedon (A2)		Polyvalue E	Below Surfac	e (S8) (ML	RA 147, 1	Co	ast Prairie	Redox (A16))	
Black His				Surface (S9)		7, 148)		(MLRA 14			
	Sulfide (A4)			yed Matrix (F	2)		Pie		odplain Soils	(F19)	
	Layers (A5)		Depleted M					(MLRA 13			
	k (A10) (LRR N)			Surface (F6				-	Dark Surface		
	Below Dark Surface (A	.11)		ark Surface			Ot	her (Explai	n in Remarks	5)	
	k Surface (A12)			ressions (F8							
	ucky Mineral (S1) MLRA 147,148)		iron-wanga (LRR N, MI	nese Masse	S (F12)						
•	eyed Matrix (S4)		•	face (F13) (MI RA 136	122\	3Indicat	ors of hydr	ophytic veget	ation and	
Sandy Re	- , ,			loodplain So					ology must be		
	Matrix (S6)			Material (F2					ed or proble		
			_			, ,					
	yer (if observed):										
Type:	I \.						Umalata Oati Ba		V	NI-	V
Depth (inc	nes):		_				Hydric Soil Pr	esent?	Yes	No _	<u>X</u>
Remarks:											
R	eclaimed coal mine gra	avel refusal									

Project/Site:	Bright Mountain Solar	City/Co	ounty:	Hazard, Perry Co	ounty	Sampling Dat	e: <u>04</u>	1/14/2022
Applicant/Owner:	Avangrid Rer	newables, LLC	_	State	: Kentucky	Sampling Poin	nt: 14-	-W014-1U
Investigator(s):	CM, RMS, JK	Section	n, Township, Rai	nge:	Cit	y of Hazard		
Landform (hillslope, terrace, etc.	c): Hilltop	Local r	elief (concave, c	convex, none):	convex	S	ope (%):	5-8
Subregion (LRR or MLRA):	LRR N	Lat:	37.293064	Long:	-83.287205	5 D	atum:	WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils,	_		·	NWI classification		_	
	ons on the site typical for this tim				plain in Remark			
	- · ·	significantly disturb		Are "Normal Circui	•	•	X	No
	, or Hydrology			If needed, explain	•			
	SS - Attach site map show	_		· ·	-	•	c.	
Hydrophytic Vegetation Pres	•	No X		,,	, important	outui oo, ot		
Hydric Soil Present?	<u>-</u>	No X	Is the Samp	alad Araa				
Wetland Hydrology Present?		No X			Vaa	No.	,	
Wettarid Hydrology Fresent?	Yes !	<u> </u>	within a We	tianu r	Yes	No	<u>×</u>	
Remarks: Reclaimed coal	mine, rocky soil							
1 10014111104 0041	Time, roomy con							
HYDROLOGY								
Wetland Hydrology Indicate Primary Indicators (minimum	ors: of one required: check all that a	anly)		ç	Secondary Indica	itors (minimum	of two re	auired)
Surface Water (A1)		rue Aquatic Plants (I	R14)	>		Cracks (B6)	OI WOTE	-quireu)
			*	-		, ,	vo Curfo	oo (D0)
High Water Table (A2)		ydrogen Sulfide Odd				getated Conca	ve Suriac	;е (Бо)
Saturation (A3)		xidized Rhizosphere	_	ois (C3)		itterns (B10)		
Water Marks (B1)		resence of Reduced		-	Moss Trim L		20)	
Sediment Deposits (B2)		ecent Iron Reduction		(C6)		Water Table (0	<i>5</i> 2)	
Drift Deposits (B3)		nin Muck Surface (C		_	Crayfish Bu			
Algal Mat or Crust (B4)	O	ther (Explain in Ren	narks)	_	Saturation V	isible on Aeria	I Imagery	(C9)
Iron Deposits (B5)				_	Stunted or S	stressed Plants	(D1)	
Inundation Visible on A	erial Imagery (B7)			_	Geomorphic	Position (D2)		
Water-Stained Leaves (B9)			_	Shallow Aqu	ıitard (D3)		
Aquatic Fauna (B13)				<u>-</u>	Microtopogr	aphic Relief (D	4)	
				-	FAC-Neutra	Test (D5)		
Field Observations:								
Surface Water Present?	Yes No X I	Depth (inches):						
Water Table Present?		Depth (inches):	_					
Saturation Present?		Depth (inches):		Wetland Hydrol	ogy Present?	Yes	No	X
	res No _X I	Deptil (iliches).		welland Hydro	ogy Fresent?	165	INO	
(includes capillary fringe)								
Describe Recorded Data (str	eam gauge, monitoring well, aeri	al photos, previous	inspections), if a	available:				
Remarks:								
I								

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 14-W014-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 0 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 x 3 = FAC species 180 FACU species x 4 = UPL species 20 x 5 = 100 820 Column Totals: (A) Prevalence Index = B/A = 4.1**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Andropogon virginicus / Broomsedge bluestem FACU 2. Phleum pratense / Common timothy, Cultivated timothy 60 Yes FACU ¹Indicators of hydric soil and wetland hydrology must 3. Trifolium pratense / Red clover 20 No FACU be present, unless disturbed or problematic. 4. Aster / Aster 20 No NI 5. Lotus corniculatus / Bird's foot trefoil, Bird's-foot trefoil 10 No FACU **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 200 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 100___ 20% of total cover: ___ 40 50% of total cover: Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>14-W014-1U</u>

	ption: (Describe to th	ne depth need	led to document th	e indicator	or confirm	the absen	ce of indicators	s.)	-		
Depth	Matrix			Features							
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc²	Texture		Remark	S	
0-7	5Y 4/1	100									
1T 0. 0		- DM Deduc	I.M MO. MII		 .		21	E DI D	I in in M	NA - t-i	
Type: C=Cond	centration, D=Depletion	n, RM=Reduc	ed Matrix, MS=Mask	ed Sand Gra	ains.		-Locai	tion: PL=Po	ore Lining, M	=Matrix.	
Hydric Soil In									ematic Hydri		
Histosol (•		Dark Surfac	, ,			_		(10) (MLRA		
	pedon (A2)			Below Surfac			48) Co		Redox (A16))	
Black His				Surface (S9)	-	7, 148)		(MLRA 14			
	Sulfide (A4)			ed Matrix (F	2)		Pie		odplain Soils	s (F19)	
	Layers (A5)		Depleted M		•			(MLRA 13		(TE40)	
	ck (A10) (LRR N)	144		Surface (F6				-	Dark Surface	, ,	
	Below Dark Surface (Ark Surface (A12)	411)		ark Surface ressions (F8			01	ner (Expiai	n in Remarks	5)	
	ucky Mineral (S1)			nese Masse	•						
	MLRA 147,148)		(LRR N, MI		3 (1 12)						
•	eyed Matrix (S4)		•	face (F13) (MLRA 136	. 122)	3Indicate	ors of hydr	ophytic vege	tation and	
Sandy Re				loodplain So					ology must be		
	Matrix (S6)			Material (F2					ed or proble		
_	<i></i>										
	yer (if observed):										
Type: Depth (inc	hes):						Hydric Soil Pr	esent?	Yes	No	X
200111 (<u> </u>								
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	ounty	Sampling Date:	04/13/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	14-W014-1W
Investigator(s):	JK, CS, RS	Section, Township	, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	e): Bowl shaped depression	Local relief (conca	ve, convex, none):	concav	e Slope	e (%): 3-8
Subregion (LRR or MLRA):			Long:	-83.293376	75 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe	ercent slopes, benche	ed, stony	NWI classification	on:	
	ons on the site typical for this time of year?			xplain in Remark	s.)	
Are Vegetation , Soil		ntly disturbed?	Are "Normal Circu	•	,	X No
	, or Hydrology naturally		(If needed, explain	•		
	S - Attach site map showing sa		,	-	·	
			ations, transcot	s, important	cutures, etc.	
Hydrophytic Vegetation Prese		_	Name and A			
Hydric Soil Present?	Yes X No		Sampled Area	., .,		
Wetland Hydrology Present?	Yes <u>X</u> No	within a	a Wetland?	Yes X	No	
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
Primary Indicators (minimum	of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)
Surface Water (A1)	True Aquation	c Plants (B14)		Surface Soi	Cracks (B6)	
High Water Table (A2)	Hydrogen S	ulfide Odor (C1)	•	Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	X Oxidized Rh	nizospheres on Living	Roots (C3)		itterns (B10)	` ,
X Water Marks (B1)		f Reduced Iron (C4)		Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled S	oils (C6)		Water Table (C2)	
Drift Deposits (B3)		Surface (C7)	()	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		ain in Remarks)	•		isible on Aerial Im	agery (C9)
Iron Deposits (B5)	Outer (Expire	an in remarks)	•		Stressed Plants (D	, ,
Inundation Visible on Ae	erial Imageny (R7)		,		Position (D2)	')
Water-Stained Leaves (E			•	Shallow Aqu	, ,	
· - ·	59)				, ,	
Aquatic Fauna (B13)			,		aphic Relief (D4)	
				X FAC-Neutra	r rest (D5)	
Field Observations:						
Surface Water Present?	Yes No X Depth (inc	hes): 1				
Water Table Present?	Yes No X Depth (inc	hes):	_			
Saturation Present?	Yes No X Depth (inc		Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)	<u> </u>	, 	_			
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 14-W014-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 60 x 1 = 50% of total cover: 20% of total cover: FACW species 22 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.27**Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai OBL 2. Juncus effusus / Common bog rush, Soft or lamp rush 20 Yes **FACW** ¹Indicators of hydric soil and wetland hydrology must 3. Scirpus cyperinus / Woolgrass **FACW** be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 41 20% of total cover: 16 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>14-W014-1W</u>

Color (moist) Succession	Profile Descri	ption: (Describe to the	depth needed	to document th	e indicator c	r confirm	the absen	ce of indicator	rs.)
O-7	Depth								
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ### Hydric Soil Indicators: Histosoi (A1)									Remarks
Hydric Soil Indicators: Histosol (A1)	0-7	2.5Y 4/1	95	5YR 4/6	5	С	M,PL	Clay Loam	
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Histosol (A1)	¹Type: C=Cond	centration, D=Depletion	RM=Reduced	Matrix, MS=Mask	ed Sand Gra	ins.		²Loca	ation: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Thick Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147,148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Polyvalue Below Surface (S8) (MLRA 147, 148) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Thick Dark Surface (A12) Seph (MLRA 136, 122) Sindicators of hydrophytic vegetation and wetland hydrology must be present. University of MLRA 148) Wetland hydrology must be present. University of MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No Remarks:	Hydric Soil In	dicators:						Indicators	s for Problematic Hydric Soils³:
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147,148) (Jumbric Surface (F13) (MLRA 136, 122) And Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 148) wetland hydrology must be present. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Histosol (A1)		Dark Surfac	e (S7)			2	cm Muck (A10) (MLRA 147)
Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Import (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Import (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Import	Histic Epi	pedon (A2)		Polyvalue E	selow Surface	e (S8) (M	LRA 147, 1	48) Co	oast Prairie Redox (A16)
Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Import (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Import (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Import				Thin Dark S	Surface (S9)	(MLRA 1	47, 148)		
Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Redox Dark Surface (F13) (LRR N, MLRA 148) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Tendanganese Matrix (F3) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Inch-Manganese Masses (F12) (LRR N, MLRA 136, 122) (LRR N, MLRA 136, 122) 3Indicators of hydrophytic vegetation and wetland hydrology must be present. Wetland hydrology must be present. Unless disturbed or problematic. Hydric Soil Present? Yes X No Remarks:		• •					•	Pi	· ·
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Iron-Manganese Masses (F12) (LRR N, MLRA 147,148) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Indicators of hydrophytic vegetation and Wetland hydrology must be present. Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No Remarks:		, ,				,			
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147,148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147,148) Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No)		Ve	•
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Iron-Manganese Masses (F12) (LRR N, MLRA 147,148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be present. Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Remarks:			11)						
Sandy Mucky Mineral (S1) (LRR N, MLRA 147,148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Wetland hydrology must be present. unless disturbed or problematic. Hydric Soil Present? Yes X No Remarks:			,					_	(— ф
(LRR N, MLRA 147,148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Remarks: (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be present. Unless disturbed or problematic. Hydric Soil Present? Yes X No									
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Wetland hydrology must be present. unless disturbed or problematic. Hydric Soil Present? Yes X No Remarks:		- , ,) (i i' <u>-</u>)			
Sandy Redox (S5)	•	•		•	•	WI RA 136	5 122)	3Indica	tors of hydrophytic vegetation and
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks:		- , ,							
Restrictive Layer (if observed): Type: Depth (inches): Remarks:									
Type:	Suipped i	wattix (50)		Ned Falent	ivialeriai (i Z	1) (IVILIX	H 121, 141)	ui	niess disturbed of problematic.
Depth (inches): Hydric Soil Present? Yes X No	Restrictive La	yer (if observed):							
Remarks:	Type:			-					
	Depth (inc	nes):						Hydric Soil P	Present? Yes X No
ROCK TEUSAI / III		ack refusal 7in							
	, r	OCK refusal / III							

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	04/14/2022
Applicant/Owner:	Avangrid Renewables	, LLC	State	: Kentucky	Sampling Point:	14-W014-1W
Investigator(s):	CM, RMS, JK	Section, Township	, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Bowl shaped depression		ve, convex, none):	concave	e Slope	e (%): 2-8
Subregion (LRR or MLRA):		37.29306817		-83.2873331	 17 Datur	m: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 p			NWI classification		-
	ons on the site typical for this time of year			plain in Remark		
, ,	••	ntly disturbed?	Are "Normal Circum	•	,	X No
	, or Hydrologynaturally		(If needed, explain	•		
· · · · · · · · · · · · · · · · · · ·	S - Attach site map showing sa		•	-	·	
	-		alions, transects	, important	leatures, etc.	
Hydrophytic Vegetation Prese						
Hydric Soil Present?	Yes <u>X</u> No	Is the S	Sampled Area			
Wetland Hydrology Present?	Yes X No	within a	a Wetland?	Yes X	No	_
Remarks: Reclaimed coal	mine, rocky fill material					
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
	of one required: check all that apply)		S	Secondary Indica	ators (minimum of	two required)
X Surface Water (A1)		ic Plants (B14)		•	Cracks (B6)	
High Water Table (A2)		Sulfide Odor (C1)	_		getated Concave S	Surface (B8)
Saturation (A3)		hizospheres on Living	Roots (C3)	Drainage Pa	atterns (B10)	` '
Water Marks (B1)		of Reduced Iron (C4)	` ′	Moss Trim L	, ,	
Sediment Deposits (B2)		n Reduction in Tilled S	oils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin Muck	Surface (C7)	` ′	Crayfish Bur	, ,	
Algal Mat or Crust (B4)		lain in Remarks)	_		isible on Aerial Im	agery (C9)
Iron Deposits (B5)	<u>—</u>	•	_	_	Stressed Plants (D	
Inundation Visible on Ae	rial Imagery (B7)		_	_	Position (D2)	•
Water-Stained Leaves (E			_	Shallow Aqu		
Aquatic Fauna (B13)	,		_		aphic Relief (D4)	
_ · · · ·				X FAC-Neutral		
				_		
Field Observations:						
Surface Water Present?	Yes X No Depth (inc	ches): 3	_			
Water Table Present?	Yes NoX Depth (inc	ches):	_			
Saturation Present?	Yes NoX Depth (inc	ches):	Wetland Hydrol	ogy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos	, previous inspections), if available:			
Remarks:						
Ī						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 14-W014-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: 30) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 80 x 1 = 50% of total cover: 20% of total cover: FACW species 5 x 2 = Sapling/Shrub Stratum (Plot size: 15 0 _ x 3 = FAC species 20 FACU species x 4 = UPL species 0 x 5 = 105 Column Totals: (A) Prevalence Index = B/A = 1.62 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai OBL 2. Andropogon virginicus / Broomsedge bluestem 20 No FACU ¹Indicators of hydric soil and wetland hydrology must 3. Scirpus cyperinus / Woolgrass 5 **FACW** be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 105 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 52 20% of total cover: 21 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>14-W014-1W</u>

Profile Descrip	otion: (Describe to the	e depth neede	d to document the	e indicator o	or confirm	the abser	nce of indicators	s.)	•	
Depth	Matrix			Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-3	5Y 4/1	99	10YR 5/8	1	С	М	Sity Clay Loam			
3-10	5Y 3/1	100					Slty Clay Loam	Reclaimed	coal mine rocky	material, rocky
	· · · · · · · · · · · · · · · · · · ·									
										_
¹Type: C=Conc	entration, D=Depletion	, RM=Reduced	d Matrix, MS=Mask	ed Sand Gra	ins.		²Loca	ition: PL=Po	re Lining, M=Ma	trix.
Hydric Soil Inc	dicators:						Indicators	for Proble	matic Hydric Sc	oils³:
Histosol (A			Dark Surfac	e (S7)					10) (MLRA 147)	
	pedon (A2)			elow Surface	(S2) /MI	DA 1/17 1		-	Redox (A16)	
_							(
Black Hist	` '			urface (S9)		7, 148)		(MLRA 14)	•	• `
	Sulfide (A4)			ed Matrix (F	2)		Pi		odplain Soils (F1	9)
Stratified I	_ayers (A5)		X Depleted Ma	atrix (F3)				(MLRA 13	6, 147)	
2 cm Mucl	k (A10) (LRR N)		Redox Dark	Surface (F6)		Ve	ery Shallow	Dark Surface (TF	12)
Depleted I	Below Dark Surface (A	11)	Depleted Da	ark Surface (F7)		Ot	ther (Explain	n in Remarks)	
Thick Dark	k Surface (A12)		Redox Depr	essions (F8)			· · · · · · · · · · · · · · · · · · ·			
Sandy Mu	cky Mineral (S1)		Iron-Mangai	nese Masses	s (F12)					
(LRR N. N	ILRA 147,148)		(LRR N, ML		` ,					
•	eyed Matrix (S4)		•	ace (F13) (I	MLRA 136	. 122)	3Indicat	tors of hydro	phytic vegetation	n and
Sandy Re				oodplain Soi					logy must be pre	
	Matrix (S6)			Material (F2					ed or problemati	
Suipped is	matrix (50)		Red Paleill	iviateriai (i Z	i) (MILIXA	127, 147)	, un	iless distuib	ed of problemati	.
Restrictive La	yer (if observed):									
Type:										
Depth (inch	nes):						Hydric Soil P	resent?	Yes X	No
			_				,			
Remarks:										

Project/Site:	Bright Mountain Solar	City/C	County:	Hazard, Perry C	ounty	Sampling Date:	04/14/2022
Applicant/Owner:	Avangrid Re	enewables, LLC		State	e: Kentucky	Sampling Point:	14-W015-1U
Investigator(s):	CM, RMS, JK	Section	on, Township, Ra	nge:	Cit	y of Hazard	
Landform (hillslope, terrace, etc.	c): Mound	Local	relief (concave,	convex, none):	convex	Slop	oe (%): 10-20
Subregion (LRR or MLRA):	LRR N	Lat:	37.298561	Long:	-83.285101	5 Dat	um: WGS 84
Soil Map Unit Name:	Fairpoint and Bethesda soils	, 2 to 70 percent sle	opes, benched, s	tony	NWI classification	on:	-
	ions on the site typical for this tin				kplain in Remark		
	X , or Hydrology			Are "Normal Circu	mstances" prese	nt? Yes	X No
	, or Hydrology			(If needed, explain	•	_	
	SS - Attach site map sho			,	=	•	_
Hydrophytic Vegetation Pres	•	No X		5110, trailecott	, important		
			la tha Sam	mlad Avaa			
Hydric Soil Present?			Is the Sam	=			
Wetland Hydrology Present?	Yes	No X	within a W	etiand?	Yes	NoX	<u> </u>
Remarks: Reclaimed coal	mine						
HYDROLOGY							
Wetland Hydrology Indicate	ors:						
Primary Indicators (minimum	of one required: check all that a	apply)			Secondary Indica	itors (minimum o	f two required)
Surface Water (A1)	T	rue Aquatic Plants	(B14)		Surface Soil	Cracks (B6)	
High Water Table (A2)		lydrogen Sulfide O	dor (C1)	•	Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	_ (xidized Rhizosphe	res on Living Ro	ots (C3)	Drainage Pa	itterns (B10)	
Water Marks (B1)	_F	resence of Reduce	ed Iron (C4)	•	Moss Trim L	ines (B16)	
Sediment Deposits (B2)) — F	Recent Iron Reducti	on in Tilled Soils	(C6)	Dry-Season	Water Table (C2	<u>'</u>)
Drift Deposits (B3)	— т	hin Muck Surface ((C7)		Crayfish Bui	rows (C8)	
Algal Mat or Crust (B4)		Other (Explain in Re		-		isible on Aerial I	magery (C9)
Iron Deposits (B5)			,	-		Stressed Plants (, ,
Inundation Visible on Ae	erial Imagery (B7)			-		Position (D2)	,
Water-Stained Leaves (• • • •			-	Shallow Aqu	, ,	
Aquatic Fauna (B13)	,			-		aphic Relief (D4))
_ ' ' '				-	FAC-Neutra		
				<u>'</u>			
Field Observations:							
Surface Water Present?	Yes No _X	Depth (inches):					
Water Table Present?	Yes NoX	Depth (inches):					
Saturation Present?	Yes NoX	Depth (inches):		Wetland Hydro	logy Present?	Yes	NoX
(includes capillary fringe)							
Describe Recorded Data (str	ream gauge, monitoring well, aei	rial photos, previous	s inspections), if	available:			
Remarks:							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 14-W015-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: _____30 ___) % Cover Species? Status 1. Juglans nigra / Black walnut FACU **Total Number of Dominant** 6 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: 5 = Total Cover OBL species 0 x 1 = ___ 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 10 x 3 = FAC species 1. Acer negundo / Boxelder, Box elder FAC FACU species 90 360 x 4 = 2. Gleditsia triacanthos / Honeylocust, Honey locust UPL species 60 x 5 = 300 (A) 690 Column Totals: 160 Prevalence Index = B/A = 4.31**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 10 _ = Total Cover 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Aster / Aster NI 2. Poa pratensis / Kentucky blue grass 30 FACU ¹Indicators of hydric soil and wetland hydrology must 3. Daucus / Wild carrot 10 No NI be present, unless disturbed or problematic. 4. Lonicera japonica / Japanese honeysuckle 10 No **FACU** 5. Rosa multiflora / Multiflora rose, Multiflora rosa FACU **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 105 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: Woody Vine Stratum (Plot size: 30 1. Lonicera japonica / Japanese honeysuckle Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. = Total Cover 50% of total cover: 20 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 14-W015-1U

	Matrix	no dopun no		Features	or contirm	the absent	ce of indicators	3.)			
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remark	S	
0-18	10YR 3/2	95	Color (molot)		1,700		Sand		rtomant		
0-18	10YR 6/6	5					Sand				
	-										
¹Type: C=Con	centration, D=Depletion	n, RM=Redu	iced Matrix, MS=Mask	ked Sand Gr	ains.		²Loca	tion: PL=Po	ore Lining, M	=Matrix.	
Hydric Soil Ir	ndicators:						Indicators	for Proble	ematic Hydri	ic Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)					(10) (MLRA		
Histic Ep	ipedon (A2)		Polyvalue E	Below Surfac	e (S8) (ML	RA 147, 14		oast Prairie	Redox (A16))	
Black His				Surface (S9)			· —	(MLRA 14			
	n Sulfide (A4)			yed Matrix (F	•		Pi	-	odplain Soils	(F19)	
	Layers (A5)		Depleted M					(MLRA 13			
	ck (A10) (LRR N)			k Surface (F	6)		_ Ve	•	Dark Surface	e (TF12)	
Depleted	Below Dark Surface (A11)	Depleted D	ark Surface	(F7)		Ot	her (Explai	n in Remarks	s)	
Thick Da	rk Surface (A12)		Redox Dep	ressions (F8)						
Sandy M	ucky Mineral (S1)		Iron-Manga	anese Masse	s (F12)						
(LRR N,	MLRA 147,148)		(LRR N, M	LRA 136)							
Sandy G	leyed Matrix (S4)		Umbric Sur	face (F13)	MLRA 136	, 122)	³ Indicat	ors of hydr	ophytic vege	tation and	
Sandy R	edox (S5)		Piedmont F	loodplain So	ils (F19) (N	ILRA 148)	we	etland hydro	ology must be	e present.	
Stripped	Matrix (S6)		Red Parent	t Material (F2	(1) (MLRA	127, 147)	un	less disturb	ed or proble	matic.	
Doctrictive L	aver (if changed):										
	ayer (if observed):										
Type:											
Type:	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):		_				Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X
Depth (inc	ches):						Hydric Soil P	resent?	Yes	No	X

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	04/14/2022
Applicant/Owner:	Avangrid Renewables,	LLC	State	e: Kentucky	Sampling Point:	14-W015-1W
Investigator(s):	CM, RMS, JK	Section, Township, I	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Bowl shaped depression	Local relief (concave		concav	e Slope	e (%): 0-8
Subregion (LRR or MLRA):		37.29865817	Long:	-83.2849448		· · ·
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70 pe			NWI classification		
· · · · · · · · · · · · · · · · · · ·	ons on the site typical for this time of year?			kplain in Remark		
Are Vegetation , Soil	,	tly disturbed?	Are "Normal Circu	•	•	X No
	, or Hydrology naturally		(If needed, explain	•		~
			•	-	•	
SUMMART OF FINDING	S - Attach site map showing sar	ilpining point loca	tions, transects	s, important	leatures, etc.	
Hydrophytic Vegetation Prese		_				
Hydric Soil Present?	Yes X No	Is the Sa	ımpled Area			
Wetland Hydrology Present?	Yes X No	within a	Wetland?	Yes X	No	_
	mine, rocky soil, off road side enterance					
HYDROLOGY						
Wetland Hydrology Indicate	ors:					
1	of one required: check all that apply)		;	Secondary Indica	itors (minimum of	two required)
Surface Water (A1)		c Plants (B14)			Cracks (B6)	
X High Water Table (A2)		ulfide Odor (C1)	-		getated Concave	Surface (B8)
X Saturation (A3)		nizospheres on Living F	Roots (C3)		atterns (B10)	,
Water Marks (B1)		Reduced Iron (C4)	•	Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled Soi	ils (C6)		Water Table (C2)	
Drift Deposits (B3)	Thin Muck S		•	Crayfish Bu	` ,	
Algal Mat or Crust (B4)		ain in Remarks)	-		isible on Aerial Im	nagery (C9)
Iron Deposits (B5)		,	-		Stressed Plants (D	, ,
Inundation Visible on Ae	rial Imagery (B7)		-		Position (D2)	,
Water-Stained Leaves (E			-	Shallow Aqu	, ,	
Aquatic Fauna (B13)	,		-		aphic Relief (D4)	
,			-	X FAC-Neutra		
			-	_		
Field Observations:						
Surface Water Present?	Yes NoX Depth (incl	hes):				
Water Table Present?	Yes X No Depth (incl	hes): 4				
Saturation Present?	Yes X No Depth (incl	hes): 0	Wetland Hydro	logy Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspections),	if available:			
Remarks:						
I						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 14-W015-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30) % Cover Species? Status 1. Salix / Willow **Total Number of Dominant** 3 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: FACW species 30 x 2 = Sapling/Shrub Stratum (Plot size: 15 75 _ x 3 = FAC species 5 FACU species 20 x 4 = UPL species 0 x 5 = Column Totals: 110 (A) Prevalence Index = B/A = 2.77 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 _ = Total Cover X 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Rumex crispus / Curly dock FAC 2. Scirpus cyperinus / Woolgrass 30 Yes FACW ¹Indicators of hydric soil and wetland hydrology must 3. Lonicera japonica / Japanese honeysuckle FACU be present, unless disturbed or problematic. 4. _ **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 19 Woody Vine Stratum (Plot size: 30 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 14-W015-1W

	iption: (Describe to th	ne depth need			or confirm	the abse	nce of indicators	.)		
Depth	Matrix			Features	T 1	12	Tandona	,		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc²	Texture		Remarks	
0-18	5Y 4/1	90	10YR 6/8	10	<u> </u>	М	Sity Clay Loam			
¹Type: C=Cor	centration, D=Depletio	n, RM=Reduce	ed Matrix, MS=Mask	ed Sand Gra	ains.		²Locat	ion: PL=Pore Li	ning, M=Mat	rix.
Hydric Soil II	ndicators:						Indicators	for Problemati	c Hydric Soi	ils³:
Histosol			Dark Surfac	ce (S7)				m Muck (A10) (
	ipedon (A2)			Below Surfac	e (S8) (MI	RΔ 147		ast Prairie Redo		
Black His				Surface (S9)				(MLRA 147, 14		
						7, 140)		•	-	\
	n Sulfide (A4)			ed Matrix (F	-)			dmont Floodpla		,
	Layers (A5)		X Depleted M		21			(MLRA 136, 14	-	40)
_	ck (A10) (LRR N)	\		Surface (F6				ry Shallow Dark		12)
	Below Dark Surface (A	A11)		ark Surface			Otr	ner (Explain in R	(emarks)	
_	rk Surface (A12)			ressions (F8						
	ucky Mineral (S1)			nese Masse	s (F12)					
-	MLRA 147,148)		(LRR N, ML	•						
Sandy G	leyed Matrix (S4)		Umbric Sur	face (F13) (MLRA 136	, 122)	³Indicato	ors of hydrophyt	ic vegetation	and
Sandy R	edox (S5)		Piedmont F	loodplain So	ils (F19) (N	ILRA 148) we	tland hydrology	must be pres	sent.
Stripped	Matrix (S6)		Red Parent	Material (F2	21) (MLRA	127, 147) unl	ess disturbed or	r problematic	i.
							1			
Restrictive L	ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil Pr	esent? Ye	es X	No
							<u> </u>			
Remarks:										

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	County	Sampling Date:	05/23/2023
Applicant/Owner:	Avangrid Renewable	s, LLC	Stat	te: Kentucky	Sampling Point:	66-UPL-001
Investigator(s):	JB SB	Section, Towns	ship, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	c):	Local relief (co	ncave, convex, none):	concav	e Slope	e (%): 0-5
Subregion (LRR or MLRA):	LRR N Lat:			-83.256580		, ,
Soil Map Unit Name:	Fairpoint and Bethesda soils, 2 to 70			NWI classification		-
	ons on the site typical for this time of year			explain in Remark		
	, or Hydrology signific		Are "Normal Circu	•	,	X No
	, or Hydrologysignification, natural		(If needed, explai	•		~
			,	-	•	
	S - Attach site map showing s		ocations, transect	s, important	leatures, etc.	
Hydrophytic Vegetation Pres		<u>x</u>				
Hydric Soil Present?	Yes No	X Is th	ne Sampled Area			
Wetland Hydrology Present?	Yes No	X with	nin a Wetland?	Yes	No X	_
sufficient amou	rification point. This landform is a man m nt of time to create hydric conditions.	ade terrace that sto	ps overland sheet flow fr	om adjacent hill s	lope but is not sat	urated for a
HYDROLOGY						
Wetland Hydrology Indicat	ors:					
Primary Indicators (minimum	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	True Aqua	atic Plants (B14)		Surface Soi	Cracks (B6)	
High Water Table (A2)	Hydrogen	Sulfide Odor (C1)		Sparsely Ve	getated Concave	Surface (B8)
Saturation (A3)	Oxidized	Rhizospheres on Liv	ring Roots (C3)	Drainage Pa	atterns (B10)	
Water Marks (B1)	Presence	of Reduced Iron (C-	4)	Moss Trim L	ines (B16)	
Sediment Deposits (B2)	Recent Iro	on Reduction in Tille	d Soils (C6)	Dry-Season	Water Table (C2)	
Drift Deposits (B3)	Thin Muc	Surface (C7)		Crayfish Bu	rows (C8)	
Algal Mat or Crust (B4)	Other (Ex	plain in Remarks)		Saturation \	isible on Aerial Im	agery (C9)
Iron Deposits (B5)	_			Stunted or S	Stressed Plants (D	1)
Inundation Visible on Ae	erial Imagery (B7)			Geomorphic	Position (D2)	
Water-Stained Leaves (B9)			Shallow Aqu	uitard (D3)	
Aquatic Fauna (B13)	,				aphic Relief (D4)	
_ ` ` ` `				FAC-Neutra		
Field Observations:						
Surface Water Present?	Yes NoX Depth (i	· -				
Water Table Present?	Yes NoX Depth (i	nches):				
Saturation Present?	Yes No X Depth (i	nches):	Wetland Hydro	ology Present?	Yes	No X
(includes capillary fringe)						
Describe Recorded Data (str	eam gauge, monitoring well, aerial photo	s, previous inspection	ons), if available:			
Remarks:						
1						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 66-UPL-001 **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: % Cover 30 feet Species? Status 1. Liriodendron tulipifera / Tuliptree FACU **Total Number of Dominant** 2. Pinus resinosa / Red pine FACU 8 ____ (B) Species Across All Strata: 3. Platanus ×hispanica / London planetree Yes NI Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: 70 = Total Cover Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 20 _ x 3 = FAC species 1. Liriodendron tulipifera / Tuliptree FACU FACU species 128 512 x 4 = FAC 2. Acer rubrum / Red maple UPL species 15 x 5 = Column Totals: 163 (A) Prevalence Index = B/A = 3.97 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 35 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 17 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Miscanthus sinensis / Chinese silvergrass FACU 2. Ageratina altissima / White snakeroot 10 FACU Yes ¹Indicators of hydric soil and wetland hydrology must 3. Parthenocissus quinquefolia / Virginia creeper 10 Yes FACU be present, unless disturbed or problematic. 4. Rubus allegheniensis / Allegheny blackberry No FACU 5. Toxicodendron radicans / Eastern poison ivy FAC No **Definitions of Four Vegetation Strata** FAC 6. Carex / Sedge No 7. Polystichum acrostichoides / Christmas fern FACU Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 29 20% of total cover: 12 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 66-UPL-001

Profile Desc Depth	ription: (Describe to t Matrix	the depth ne		ne indicato x Features	or confirm	the abser	nce of indicators	s.)			
(inches)	Color (moist)	%	Color (moist)	% realures	Type ¹	Loc²	Texture		Remar	ks	
0-3	10YR 5/2	95	10YR 6/4	5	C	M	Clay Loam		rtoman	ito .	
3-6	10YR 3/1	95	10YR 5/6	5	C	M	Clay Loam				
6-8	2.5Y 5/2	60	10YR 5/6	40	C	M	Clay Loam				
- 0 0	2.01 0/2		10111070		- <u> </u>		Oldy Louin				
			-	_			-				
	-										
	-										
	-	-	-					-			
				_							
Type: C=Cor	ncentration, D=Depletion	on, RM=Red	uced Matrix, MS=Mas	ked Sand G	rains.		²Loca	tion: PL=P	ore Lining, N	∕I=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Probl	ematic Hydı	ric Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A	410) (MLRA	147)	
Histic Ep	pipedon (A2)		Polyvalue	Below Surfa	ce (S8) (MI	_RA 147, 1	48) Co	oast Prairie	Redox (A16	6)	
Black Hi	stic (A3)		Thin Dark	Surface (S9)) (MLRA 14	17, 148)		(MLRA 1	47, 148)		
Hydroge	n Sulfide (A4)		Loamy Gle	yed Matrix (F2)		Pi	edmont Flo	odplain Soil	s (F19)	
	d Layers (A5)		Depleted N					(MLRA 1			
2 cm Mu	ick (A10) (LRR N)		Redox Dar	k Surface (F	- 6)			-	Dark Surfac		
Depleted	d Below Dark Surface ((A11)		Oark Surface			Ot	ther (Expla	in in Remark	s)	
	ark Surface (A12)			oressions (F							
	lucky Mineral (S1)			anese Mass	es (F12)						
•	MLRA 147,148)		(LRR N, M	-							
	Gleyed Matrix (S4)				(MLRA 136				ophytic vege		
	ledox (S5)				oils (F19) (N				ology must b		
Stripped	Matrix (S6)		Red Paren	t Material (F	(21) (MLR	127, 147	un	ıless distur	bed or proble	ematic.	
Restrictive L	ayer (if observed):										
Type:											
Depth (in	ches):						Hydric Soil P	resent?	Yes	No _	Χ
Remarks:											
	Gravel refusal										

Project/Site:	Bright Mountain Solar	City/Co	ounty: Hazard, Pe	erry County	Sampling Date:	05/23/2023
Applicant/Owner:	Avangrid	Renewables, LLC		State: Kentucky	Sampling Point:	66-UPL-002
Investigator(s):	JB SB	Section	n, Township, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc			elief (concave, convex, none			e (%): 0-5
Subregion (LRR or MLRA):	LRR N		7.29561367 Long:			` ′ ———
Soil Map Unit Name:		and complex, 15 to 35 p		NWI classification		
Are climatic / hydrologic condition				no, explain in Remark		
				Circumstances" prese	,	X No
	, or Hydrology			•		X No
· · · · · · · · · · · · · · · · · · ·	, or Hydrology			explain any answers in	•	
SUMMARY OF FINDING	S - Attach site map s	nowing sampling	point locations, trans	sects, important	features, etc.	
Hydrophytic Vegetation Prese	ent? Yes	No X				
Hydric Soil Present?	Yes	No X	Is the Sampled Area			
Wetland Hydrology Present?	Yes	No X	within a Wetland?	Yes	No X	
		<u> </u>				
Remarks:						
Non wetland ver	ification point. Terrace with s	some hydrophytic specie	es. Hydric soils or hydrology	not present.		
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
Primary Indicators (minimum		at annly)		Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	51 One required: encor all the	True Aquatic Plants (21/1)		Cracks (B6)	two required)
High Water Table (A2)	_		•		, ,	Curfoco (DO)
` ` '	_	Hydrogen Sulfide Odd	, ,		getated Concave	Surface (Do)
Saturation (A3)	_	•	es on Living Roots (C3)		atterns (B10)	
Water Marks (B1)	_	Presence of Reduced		Moss Trim L	, ,	
Sediment Deposits (B2)	_	Recent Iron Reduction	` '		Water Table (C2)	
Drift Deposits (B3)	_	Thin Muck Surface (C	27)	Crayfish Bu	rrows (C8)	
Algal Mat or Crust (B4)	_	Other (Explain in Ren	narks)	Saturation V	isible on Aerial Im	agery (C9)
Iron Deposits (B5)				Stunted or S	Stressed Plants (D	1)
Inundation Visible on Ae	rial Imagery (B7)			Geomorphic	Position (D2)	
Water-Stained Leaves (E	39)			Shallow Aqu	uitard (D3)	
Aquatic Fauna (B13)	,				aphic Relief (D4)	
				FAC-Neutra	. , ,	
Field Observations:						
Surface Water Present?	Yes No X	Depth (inches):				
Water Table Present?	Yes No X	Depth (inches):				
Saturation Present?	Yes No X	Depth (inches):	Wetland I	Hydrology Present?	Yes	No X
(includes capillary fringe)	163 NO X			lydrology i resent:		NO X
(includes capillary infige)						
Describe Recorded Data (stre	am gauge monitoring well	aerial nhotos, previous	inspections) if available:			
Describe Recorded Data (sire	an gauge, monitoring well,	aeriai priotos, previous	mapections), if available.			
Remarks:						
romano.						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 66-UPL-002 **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 1 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: 15 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 10 x 3 = FAC species 400 100 FACU species x 4 = UPL species 0 x 5 = Column Totals: 125 (A) Prevalence Index = B/A = 3.68 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet Problematic Hydrophytic Vegetation¹ (Explain) 1. Miscanthus sinensis / Chinese silvergrass **FACU** 2. Rosa multiflora / Multiflora rose, Multiflora rosa 20 No FACU ¹Indicators of hydric soil and wetland hydrology must 3. Vernonia gigantea / Giant ironweed 10 No FAC be present, unless disturbed or problematic. 4. Eutrochium maculatum / Spotted trumpetweed 10 No **FACW** 5. Solidago gigantea / Smooth goldenrod 5 FACW **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 125 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 62 20% of total cover: 25 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 66-UPL-002

	iption: (Describe to th	ne depth nee			or confirm	the abser	nce of indicator	rs.)		
Depth	Matrix			Features					_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-5	10YR 4/3	100					Silty Clay			
5-10	10YR 4/6	90	10YR 5/6	10	<u>C</u>	M	Clay Loam			
							-			
								-		
¹Type: C=Con	centration, D=Depletion	n, RM=Reduc	ed Matrix, MS=Mask	ked Sand Gr	ains.		²Loca	ation: PL=Po	ore Lining, M=Ma	atrix.
Hydric Soil In	idicators:						Indicator	s for Proble	ematic Hydric S	oils³:
Histosol (Dark Surfa	ce (S7)					(10) (MLRA 147	
	ipedon (A2)			Below Surfac	(S2) (MI	P Δ 1/17 1		-	Redox (A16)	,
Black His	. ,			Surface (S9)				(MLRA 14		
	, ,					7, 140)	Ь	•	•	0)
	n Sulfide (A4)			yed Matrix (F	-2)		<u> </u>		odplain Soils (F1	9)
	Layers (A5)		Depleted M					(MLRA 13	•	
	ck (A10) (LRR N)			k Surface (F	•				Dark Surface (T	F12)
_	Below Dark Surface (A	A11)		ark Surface			<u> </u>	ther (Explai	n in Remarks)	
	rk Surface (A12)		Redox Dep	ressions (F8	3)					
Sandy M	ucky Mineral (S1)		Iron-Manga	anese Masse	es (F12)					
(LRR N,	MLRA 147,148)		(LRR N, M	LRA 136)						
Sandy Gl	leyed Matrix (S4)		Umbric Sur	face (F13)	(MLRA 136	, 122)	³ Indica	tors of hydro	ophytic vegetatio	on and
Sandy Re	edox (S5)		Piedmont F	loodplain Sc	oils (F19) (N	ILRA 148)	w	etland hydro	ology must be pro	esent.
	Matrix (S6)			t Material (F2					ped or problemat	
					, ,					
Restrictive La	ayer (if observed):									
Type:										
Depth (inc	ches):		<u> </u>				Hydric Soil F	resent?	Yes	No X
										<u> </u>
Remarks:										
(Gravel refusal.									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	05/24/2023
Applicant/Owner:	Avangrid Renewable	s, LLC	State	e: Kentucky	Sampling Point:	66-W001-1U
Investigator(s):	JB SB	Section, Township	o, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): foot of slope		ave, convex, none):	convex	Slope	e (%): 20-30
Subregion (LRR or MLRA):	LRR N Lat		· —	-83.254088		· · ·
Soil Map Unit Name:	Shelocta-Cutshin-Gilpin complex, 20			NWI classification		
	ons on the site typical for this time of year			kplain in Remark		
, ,	••	antly disturbed?	Are "Normal Circur	•	,	X No
	, or Hydrologynatura		(If needed, explain	•		<u>~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ </u>
			,	· ·	•	
SUMMART OF FINDING	S - Attach site map showing s	ampling point loc	zations, transects	, important	reatures, etc.	
Hydrophytic Vegetation Prese	ent? Yes No	X				
Hydric Soil Present?	Yes No	X Is the	Sampled Area			
Wetland Hydrology Present?	Yes No	X within	a Wetland?	Yes	No X	_
Remarks: Foot of slope ad	jacent to the road.					
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
	of one required: check all that apply)		5	Secondary Indica	ators (minimum of	two required)
Surface Water (A1)		atic Plants (B14)		•	Cracks (B6)	
High Water Table (A2)		Sulfide Odor (C1)	=		getated Concave	Surface (B8)
Saturation (A3)		Rhizospheres on Living	a Roots (C3)		atterns (B10)	(),
Water Marks (B1)		of Reduced Iron (C4)	_	Moss Trim L	` ,	
Sediment Deposits (B2)		on Reduction in Tilled S	Soils (C6)		Water Table (C2)	
Drift Deposits (B3)		k Surface (C7)	_	Crayfish Bur	` ,	
Algal Mat or Crust (B4)		plain in Remarks)	=		isible on Aerial Im	agery (C9)
Iron Deposits (B5)		piani ni riomano,	=		Stressed Plants (D	, ,
Inundation Visible on Ae	rial Imagery (B7)		-		Position (D2)	•,
Water-Stained Leaves (E	3 , , ,		-	Shallow Aqu	, ,	
Aquatic Fauna (B13)			-		aphic Relief (D4)	
			=	FAC-Neutral	. , ,	
						
Field Observations:						
Surface Water Present?	Yes NoX Depth (i	nches):	<u></u>			
Water Table Present?	Yes No X Depth (i	nches):	<u> </u>			
Saturation Present?	Yes No X Depth (i	nches):	Wetland Hydrol	logy Present?	Yes	No X
(includes capillary fringe)			_			· ——
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photo	os, previous inspections	L s), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 66-W001-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) % Cover Tree Stratum (Plot size: Species? Status 1. Liriodendron tulipifera / Tuliptree FACU **Total Number of Dominant** 2. Platanus ×hispanica / London planetree NI 5 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover x 1 = OBL species 20 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 20 x 3 = FAC species 1. Lonicera morrowii / Morrow's honeysuckle 340 **FACU** species 85 x 4 = UPL species 10 x 5 = (A) Column Totals: 115 Prevalence Index = B/A = 3.91 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 15 = Total Cover 3 - Prevalence Index ≤3.01 7 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Miscanthus sinensis / Chinese silvergrass **FACU** 15 FAC 2. Aster / Aster ¹Indicators of hydric soil and wetland hydrology must 3. Polystichum acrostichoides / Christmas fern 10 No FACU be present, unless disturbed or problematic. 4. Carex / Sedge No FAC 5. Galium aparine / Cleavers, Goose grass FACU **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. 11. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 30 20% of total cover: 12 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>66-W001-1U</u>

Depth	ription: (Describe to t Matrix			Features				•		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture		Remarks	
0-6	10YR 4/3	85	10YR 5/6	5			Clay Loam			
0-6			10YR 4/2	10	D	М	Clay Loam			
	-									
	-	- ——								
[vne: C=Cor	ncentration, D=Depletion	n RM=Redu	cod Matrix MS=Mask	ed Sand Gr	aine		21 003	tion: PI =Pi	ore Lining, M=	Matriy
	•	Jii, IXIVI–IXEGUI	Sed Matrix, MS-Mass	ved Sand Gr	aii i5.					
ydric Soil I			Dork Surfa	00 (87)					ematic Hydric	
Histosol	• •		Dark Surfac		o (CO) /MI	DA 147 1		-	10) (MLRA 1	47)
	pipedon (A2)			Below Surfac			— C		Redox (A16)	
	stic (A3)			Surface (S9)		1, 148)	5 .	MLRA 14)	•	E10)
	en Sulfide (A4)			yed Matrix (F	-2)		Pi		odplain Soils (F19)
	d Layers (A5)		Depleted M					(MLRA 13		
	ıck (A10) (LRR N)			k Surface (F					Dark Surface	(TF12)
Depleted	d Below Dark Surface (A11)	Depleted D	ark Surface	(F7)		Ot	her (Explai	n in Remarks)	
Thick Da	ark Surface (A12)		Redox Dep	ressions (F8	3)					
Sandy M	lucky Mineral (S1)		Iron-Manga	anese Masse	es (F12)					
_ ′	MLRA 147,148)		(LRR N, M		,					
	Gleyed Matrix (S4)		•	face (F13)	(MI RΔ 136	122)	3Indicat	ors of hydr	ophytic vegeta	tion and
					-					
	Redox (S5)			Floodplain So					ology must be	
Stripped	Matrix (S6)		Red Parent	t Material (F2	21) (MLRA	127, 147)	un	iless disturi	oed or problem	atic.
	.ayer (if observed):									
Type:	ala a a \.						Undein Cail D		Van	Na V
Depth (in	cries).						Hydric Soil P	resent?	Yes	NoX
emarks:	Gravel refusal.									
	Craver reladai.									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C						
Applicant/Owner:	Avangrid Renewabl	es, LLC	State	e: Kentucky	Sampling Point:	66-W001-1W			
Investigator(s):	JB SB	Section, Township	, Range:	Cit	y of Hazard				
Landform (hillslope, terrace, etc.	c): Swale	Local relief (conca	ive, convex, none):	concav	e Slope	e (%): <u>0-5</u>			
Subregion (LRR or MLRA):	LRR N La	t: 37.294988	Long:	-83.25410	3 Datur	m: WGS 84			
Soil Map Unit Name:	Shelocta-Cutshin-Gilpin complex, 20	to 75 percent slopes, v	ery stony	NWI classification	on:	_			
Are climatic / hydrologic conditi	ons on the site typical for this time of ye	ar? Yes X	No (If no, e	xplain in Remark	s.)				
Are Vegetation, Soil	, or Hydrologysignifi	cantly disturbed?	Are "Normal Circu	mstances" prese	ent? Yes	X No			
Are Vegetation, Soil	, or Hydrologynatura	ally problematic?	(If needed, explain	n any answers in	Remarks.)				
SUMMARY OF FINDING	SS - Attach site map showing	sampling point lo	cations, transects	s, important	features, etc.				
Hydrophytic Vegetation Pres	ent? Yes X No								
Hydric Soil Present?	Yes X No	Is the S	Sampled Area						
Wetland Hydrology Present?			a Wetland?	Yes X	No				
, , , , , , , , , , , , , , , , , , , ,									
Remarks:		5							
Roadside draina	age ditch portrays wetland characteristic	cs. Receives hydrology i	rom intermittent strear	n.					
HYDROLOGY									
Wetland Hydrology Indicate	ore:								
1	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)			
X Surface Water (A1)		uatic Plants (B14)		-	Cracks (B6)	.wo required)			
X High Water Table (A2)		n Sulfide Odor (C1)	•		getated Concave S	Surface (B8)			
X Saturation (A3)		Rhizospheres on Living	Roots (C3)	X Drainage Pa	-	suriace (Bo)			
Water Marks (B1)	_	e of Reduced Iron (C4)	11000 (00)	Moss Trim L	, ,				
Sediment Deposits (B2)		ron Reduction in Tilled S	Soils (C6)		, ,				
Drift Deposits (B3)		ck Surface (C7)	<u> </u>						
Algal Mat or Crust (B4)		xplain in Remarks)							
Iron Deposits (B5)	Other (E	Apiaiii iii Nemarkoj	•		Stressed Plants (D				
Inundation Visible on Ae	erial Imagery (R7)		•		Position (D2)	')			
Water-Stained Leaves (5 , ,		•	Shallow Aqu	, ,				
Aquatic Fauna (B13)	29)		•		aphic Relief (D4)				
Aquatic Faulia (B10)			•	X FAC-Neutra					
			<u> </u>	77.0 140414	1 1631 (20)				
Field Observations:									
Surface Water Present?	Yes X No Depth	(inches): 2	_						
Water Table Present?	Yes X No Depth	(inches): 0	_						
Saturation Present?	Yes X No Depth	(inches): 0	Wetland Hydro	logy Present?	Yes X	No			
(includes capillary fringe)									
December December Detector			V (6) - - - - - - - - -						
Describe Recorded Data (str	eam gauge, monitoring well, aerial phot	os, previous inspections	s), if available:						
Remarks:									

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 66-W001-1W **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: _ (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 25 x 1 = 50% of total cover: 20% of total cover: FACW species 50 x 2 = Sapling/Shrub Stratum (Plot size: 15 feet 0 _ x 3 = FAC species 0 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 1.67 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: 5 feet Problematic Hydrophytic Vegetation¹ (Explain) 1. Juncus effusus / Common bog rush, Soft or lamp rush **FACW** Yes 2. Typha angustifolia / Narrow leaf cattail, Narrow-leaved cattai 15 OBL Yes ¹Indicators of hydric soil and wetland hydrology must 3. Carex lurida / Shallow sedge 10 No OBL be present, unless disturbed or problematic. 4. Salix / Willow 10 No **FACW** 5. Eutrochium maculatum / Spotted trumpetweed 5 No **FACW Definitions of Four Vegetation Strata** 6. Impatiens capensis / Spotted jewelweed **FACW** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 75 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 37 20% of total cover: 15 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>66-W001-1W</u>

	iption: (Describe to th	ne depth need			or confirm	the absen	ce of indicators	s.)
Depth	Matrix	0/		Features	T 1	12	Tanduna	Domonico
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	90	2.5Y 6/6	10	<u> </u>	<u>M</u>	Silty Clay	
								-
								-
¹Type: C=Cor	centration, D=Depletion	n, RM=Reduce	d Matrix, MS=Mask	ed Sand Gra	ains.		²Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil II	ndicators:						Indicators	for Problematic Hydric Soils³:
Histosol	(A1)		Dark Surfac	ce (S7)				cm Muck (A10) (MLRA 147)
	ipedon (A2)			Selow Surfac	e (S8) (ML	RA 147. 1		past Prairie Redox (A16)
Black His				Surface (S9)				(MLRA 147, 148)
	n Sulfide (A4)			ed Matrix (F		.,,	Pi	edmont Floodplain Soils (F19)
	Layers (A5)		X Depleted M		-,		· "	(MLRA 136, 147)
	ck (A10) (LRR N)			Surface (F6	3)		Ve	ery Shallow Dark Surface (TF12)
	Below Dark Surface (A	\11\		ark Surface				ther (Explain in Remarks)
_	rk Surface (A12)	XII)		ressions (F8				ther (Explain in Remarks)
_	ucky Mineral (S1)			nese Masse	•			
	MLRA 147,148)		(LRR N, MI		S (F12)			
			•	•	MI DA 426	400)	31	
	leyed Matrix (S4)			face (F13) (tors of hydrophytic vegetation and
	edox (S5)			loodplain So				etland hydrology must be present.
Stripped	Matrix (S6)		Red Parent	Material (F2	(MLRA	127, 147)	un	nless disturbed or problematic.
Restrictive I	ayer (if observed):							
Type:	ayor (ii oboorvou).							
Depth (in	shoe):						Hydric Soil P	resent? Yes X No
Deptii (iiii			<u> </u>				Tiyunc 3011 F	resent: les A NO
Remarks:								

Project/Site:	Bright Mountain Solar	City/Co	unty: Hazard, Perr	y County	Sampling Date:	05/24/2023
Applicant/Owner:	Avangrid Ro	enewables, LLC	S	State: Kentucky	Sampling Point:	66-W002-1U
Investigator(s):	JB SB	Section	, Township, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc): Hillslope		elief (concave, convex, none):	concave	e Slope	(%): 20-30
Subregion (LRR or MLRA):	LRR N		7.2948315 Long:	-83.254063		
Soil Map Unit Name:	Shelocta-Cutshin-Gilpin com			NWI classification		
Are climatic / hydrologic condition				o, explain in Remark		
Are Vegetation, Soil				ircumstances" prese	,	X No
	, or Hydrology			plain any answers in		
				<u>-</u>	•	
SUMMARY OF FINDING	-	wing sampling	point locations, transe	cts, important	reatures, etc.	
Hydrophytic Vegetation Prese	ent? Yes	No X				
Hydric Soil Present?	Yes	No X	Is the Sampled Area			
Wetland Hydrology Present?	Yes	No X	within a Wetland?	Yes	No X	_
Remarks: Forested hillslop	e					
HYDROLOGY						
Wetland Hydrology Indicato	nre'					
• •	of one required: check all that	annly)		Secondary Indica	ators (minimum of t	wo required)
Surface Water (A1)	•	True Aquatic Plants (E	214)		Cracks (B6)	wo required)
High Water Table (A2)		Hydrogen Sulfide Odd	·		getated Concave S	Surface (BR)
Saturation (A3)			s on Living Roots (C3)		atterns (B10)	Juliace (DO)
Water Marks (B1)		Presence of Reduced	- ' '	Moss Trim L		
Sediment Deposits (B2)		Recent Iron Reduction	` '		Water Table (C2)	
			` '		` ,	
Drift Deposits (B3)		Thin Muck Surface (C		Crayfish Bur	, ,	(00)
Algal Mat or Crust (B4)	- '	Other (Explain in Rem	arks)	_	isible on Aerial Ima	, ,
Iron Deposits (B5)	min			_	Stressed Plants (D1	1)
Inundation Visible on Ae	• • • •				Position (D2)	
Water-Stained Leaves (E	39)			Shallow Aqu	, ,	
Aquatic Fauna (B13)					aphic Relief (D4)	
				FAC-Neutral	l Test (D5)	
Field Observations:						
Surface Water Present?	Yes No X	Depth (inches):				
Water Table Present?	Yes No X	Depth (inches):				
Saturation Present?	Yes No X	Depth (inches):	Wetland Hy	drology Present?	Yes	No X
(includes capillary fringe)	165 146X	Deput (mones).		arology i resemi.		<u> </u>
(includes capillary infige)						
Describe Recorded Data (stre	eam gauge, monitoring well, ae	rial photos, previous i	nspections), if available:			
,			. ,			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 66-W002-1U **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 _ (A) 30 feet % Cover Tree Stratum (Plot size: Species? Status **FACU** 1. Pinus resinosa / Red pine **Total Number of Dominant** 2. Liriodendron tulipifera / Tuliptree FACU 6 ____ (B) Species Across All Strata: 3. Tsuga canadensis / Eastern hemlock 15 Yes FACU 4. Platanus ×hispanica / London planetree 10 No NI Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover x 1 = OBL species 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 5 x 3 = FAC species 1. Fagus grandifolia / American beech 480 **FACU** species 120 x 4 = UPL species 15 x 5 = (A) Column Totals: 140 Prevalence Index = B/A = 4.07 **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 10 = Total Cover 3 - Prevalence Index ≤3.01 5 20% of total cover: 50% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: 5 feet Problematic Hydrophytic Vegetation¹ (Explain) 1. Rosa multiflora / Multiflora rose, Multiflora rosa **FACU** 2. Polystichum acrostichoides / Christmas fern 15 FACU ¹Indicators of hydric soil and wetland hydrology must 3. Amphicarpaea / Hogpeanut 5 NI be present, unless disturbed or problematic. 4. Toxicodendron radicans / Eastern poison ivy FAC **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 32 20% of total cover: 13 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 66-W002-1U

Profile Descripe	ription: (Describe to t Matrix	he depth ne		ne indicator x Features	or confirm	the abser	nce of indicator	s.)			
(inches)	Color (moist)	%	Color (moist)	x realures %	Type ¹	Loc²	Texture		Remar	ks	
0-8	10YR 3/3	100	Color (moist)	/0	Туре	LUC	Clay Loam		Remai	No	
8-18	10YR 4/3	95	10YR 5/4	5		M	Clay Loam				
0 10	10111 4/0		10111014			101	Olay Loam				
				-							
				-							
				-							
				-							
				-							
				-							
				-							
¹Type: C=Cor	centration, D=Depletion	on, RM=Redu	ced Matrix, MS=Mas	ked Sand Gr	rains.		²Loca	ation: PL=P	ore Lining, N	Л=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Probl	ematic Hyd	ric Soils³:	
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (410) (MLRA	147)	
	ipedon (A2)			Below Surfac	ce (S8) (MI	RA 147, 1		,	Redox (A16	-	
Black Hi				Surface (S9)			<i>'</i> —	(MLRA 1	•	,	
_	n Sulfide (A4)			yed Matrix (, ,	Pi	•	odplain Soil	s (F19)	
	Layers (A5)		Depleted N		,			(MLRA 1		` ,	
	ck (A10) (LRR N)			k Surface (F	- 6)		Ve	-	Dark Surfac	ce (TF12)	
	l Below Dark Surface ((A11)		oark Surface				-	in in Remark		
	rk Surface (A12)	,		oressions (F			_			•	
	lucky Mineral (S1)			anese Masse							
(LRR N,	MLRA 147,148)		(LRR N, M								
	leyed Matrix (S4)		Umbric Su	rface (F13)	(MLRA 136	, 122)	³Indica	tors of hyd	ophytic veg	etation and	
Sandy R	edox (S5)		Piedmont I	Floodplain S	oils (F19) (N	/ILRA 148)			ology must b		
_	Matrix (S6)			t Material (F					bed or probl		
De eteletica I						1					
	ayer (if observed):										
Type: Depth (in	choe):						Hydric Soil P	rocont?	Yes	No	Y
Deptii (iii			<u> </u>				Hydric 30ii P	resenti	165		X
Remarks:											

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry Co	ounty	Sampling Date:	05/24/2023		
Applicant/Owner:	Avangrid Renewables	s, LLC	State	: Kentucky	Sampling Point:	66-W002-1W		
Investigator(s):	JB SB	Section, Township	, Range:	Cit	y of Hazard			
Landform (hillslope, terrace, etc.	c): Hill seep	Local relief (conca	ve, convex, none):	e):				
Subregion (LRR or MLRA):	LRR N Lat:	37.294884	Long:	-83.25403	4 Datun	n: WGS 84		
Soil Map Unit Name:	Shelocta-Cutshin-Gilpin complex, 20 t	o 75 percent slopes, ve	ery stony	NWI classification	on:			
Are climatic / hydrologic condition	ons on the site typical for this time of yea	r? Yes X	No (If no, ex	plain in Remark	s.)			
Are Vegetation, Soil	, or Hydrologysignification	antly disturbed?	Are "Normal Circur	nstances" prese	ent? Yes 2	X No		
Are Vegetation, Soil	, or Hydrologynaturall	y problematic?	(If needed, explain	any answers in	Remarks.)			
SUMMARY OF FINDING	S - Attach site map showing s	ampling point loc	ations, transects	, important	features, etc.			
Hydrophytic Vegetation Prese	ent? Yes X No							
Hydric Soil Present?	Yes X No	Is the S	Sampled Area					
Wetland Hydrology Present?			a Wetland?	Yes X	No			
, ,,						-		
Remarks:								
Hill seep has ov	rerland flow connection to 66-W001. PFO	wetland has upland tre	e overstory overhangi	ing wetland.				
HYDROLOGY								
Wetland Hydrology Indicator	of one required: check all that apply)		c	Cocondany Indias	otors (minimum of t	two required)		
X Surface Water (A1)		tic Plants (B14)			ators (minimum of t	.wo required)		
X High Water Table (A2)		Sulfide Odor (C1)	-		l Cracks (B6) getated Concave S	Surface (DO)		
X Saturation (A3)		Rhizospheres on Living	Poets (C3)		atterns (B10)	Juliace (DO)		
Water Marks (B1)		of Reduced Iron (C4)		Moss Trim L	, ,			
Sediment Deposits (B2)		n Reduction in Tilled S	eile (CG)		Water Table (C2)			
			ulis (C0)		` ,			
Drift Deposits (B3)		Surface (C7)	-	Crayfish Bu	, ,	(00)		
Algal Mat or Crust (B4)	Other (Exp	olain in Remarks)	-		isible on Aerial Im			
Iron Deposits (B5)	wiel Images (DZ)		-		Stressed Plants (D1	1)		
Inundation Visible on Ae	• , ,		-		Position (D2)			
Water-Stained Leaves (F	59)		-	Shallow Aqu	, ,			
Aquatic Fauna (B13)			-		aphic Relief (D4)			
			<u>-</u>	X FAC-Neutra	r rest (D5)			
Field Observations:								
Surface Water Present?	Yes X No Depth (ir	iches): .25						
Water Table Present?	Yes X No Depth (ir	iches): 5	-					
Saturation Present?	Yes X No Depth (in	iches): 0	Wetland Hydrol	ogy Present?	Yes X	No		
(includes capillary fringe)	 · ·	· -	-					
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photo	s, previous inspections), if available:					
Remarks:								
Nomano.								

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 66-W002-1W **Dominance Test worksheet: Number of Dominant Species** Absolute Dominant Indicator That Are OBL, FACW, or FAC: (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 25 x 1 = 50% of total cover: 20% of total cover: FACW species 60 x 2 = Sapling/Shrub Stratum (Plot size: 15 feet 0 x 3 = 0 FAC species 15 FACU species x 4 = UPL species 0 x 5 = Column Totals: (A) Prevalence Index = B/A = 2.05 **Hydrophytic Vegetation Indicators:** X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 0 = Total Cover X 3 - Prevalence Index ≤3.01 20% of total cover: 50% of total cover: 4 - Morphological Adaptations1 (Provide supporting Herb Stratum (Plot size: 5 feet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Glyceria / Mannagrass **FACW** 2. Carex vulpinoidea / Fox sedge, Brown fox sedge 25 OBL Yes ¹Indicators of hydric soil and wetland hydrology must 3. Rosa multiflora / Multiflora rose, Multiflora rosa 15 No FACU be present, unless disturbed or problematic. 4. Eutrochium maculatum / Spotted trumpetweed 10 **FACW Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less 100 = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 50 20% of total cover: 20 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 66-W002-1W

Profile Descr	iption: (Describe to th	e depth need	ded to document the	indicator	or confirm	the abser	nce of indicators.)	
Depth	Matrix		Redox I	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	90	10YR 6/4	10	<u>C</u>	М	Silty Clay	
¹Type: C=Con	centration, D=Depletion	n, RM=Reduc	ed Matrix, MS=Maske	ed Sand Gr	ains.		² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil Ir	idicators:						Indicators for	Problematic Hydric Soils³:
Histosol	(A1)		Dark Surface	e (S7)			2 cm l	Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be		ce (S8) (ML	RA 147, 1		Prairie Redox (A16)
Black His			Thin Dark Su					LRA 147, 148)
_	n Sulfide (A4)		Loamy Gleye		•	, -,	· · · · · · · · · · · · · · · · · · ·	nont Floodplain Soils (F19)
	Layers (A5)		X Depleted Ma		',			LRA 136, 147)
_	ck (A10) (LRR N)		Redox Dark		6)		•	Shallow Dark Surface (TF12)
_	Below Dark Surface (A	(11)	Depleted Da					(Explain in Remarks)
_	rk Surface (A12)	(11)	Redox Depre					(Explain in Nomano)
	ucky Mineral (S1)		Iron-Mangan					
	MLRA 147,148)		(LRR N, MLI		33 (1 12)			
-	leyed Matrix (S4)		Umbric Surfa		/MI PA 136	122\	3Indicators	of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					nd hydrology must be present.
	Matrix (S6)		Red Parent I					s disturbed or problematic.
Stripped	iviatrix (56)		Red Parent i	viateriai (F2	ZI) (WILKA	121, 141)	unies	s disturbed or problematic.
Restrictive L	ayer (if observed):							
Type:								
Depth (ind	ches):						Hydric Soil Pres	ent? Yes X No
Remarks:								
rtomanto.								

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry (County	Sampling Date:	05/24/2023
Applicant/Owner:	Avangrid Renewables,	LLC	Sta	te: Kentucky	Sampling Point:	66-W003-1U
Investigator(s):	JB SB	Section, Towns	hip, Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	e): head of slope	Local relief (cor	ncave, convex, none):	concav	e Slope	e (%): 0-5
Subregion (LRR or MLRA):		- 37.29429	·	-83.253435		
Soil Map Unit Name:	Shelocta-Cutshin-Gilpin complex, 20 to			NWI classification		
	ons on the site typical for this time of year?			explain in Remark	_	
		tly disturbed?		umstances" prese	,	X No
	, or Hydrologynaturally p	-		in any answers in		<u> </u>
	S - Attach site map showing sar		,	-	•	
Hydrophytic Vegetation Prese	ent? Yes No X					
Hydric Soil Present?	Yes No X		e Sampled Area			
Wetland Hydrology Present?			in a Wetland?	Yes	No X	
Remarks: Maintained prop	perty vegetation has been recently mowed					
HYDROLOGY						
Wetland Hydrology Indicato	ors:					
"	of one required: check all that apply)			Secondary Indica	ators (minimum of	two required)
Surface Water (A1)	• • • • • • • • • • • • • • • • • • • •	Plants (B14)			Cracks (B6)	
High Water Table (A2)		ulfide Odor (C1)			getated Concave	Surface (B8)
Saturation (A3)		izospheres on Liv	ing Roots (C3)		atterns (B10)	(-1)
Water Marks (B1)		Reduced Iron (C4	• ,	Moss Trim L	` ,	
Sediment Deposits (B2)		Reduction in Tille			Water Table (C2)	
Drift Deposits (B3)	Thin Muck S		a cono (co)	Crayfish Bu	, ,	
Algal Mat or Crust (B4)		ain in Remarks)			isible on Aerial Im	nagery (CQ)
Iron Deposits (B5)	Other (Expla	iii iii rteiriarks)			Stressed Plants (D	, ,
Inundation Visible on Ae	erial Imagary (P7)				Position (D2)	1)
—						
Water-Stained Leaves (E	39)			Shallow Aqu	, ,	
Aquatic Fauna (B13)					aphic Relief (D4)	
				FAC-Neutra	i lest (D5)	
Field Observations:						
Surface Water Present?	Yes No X Depth (inch	nes).				
Water Table Present?	Yes No X Depth (inch	, <u> </u>	-			
Saturation Present?	Yes No X Depth (incl		Wotland Hydr	ology Present?	Yes	No X
(includes capillary fringe)	Tes No _X Deptit (inci		Welland Hydr	ology Fresent:	163	
(includes capillary infige)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos,	previous inspection	ons), if available:			
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: 66-W003-1U **Dominance Test worksheet:** Number of Dominant Species Absolute Dominant Indicator That Are OBL, FACW, or FAC: 0 (A) Tree Stratum (Plot size: 30 feet) % Cover Species? Status **Total Number of Dominant** 2 ____ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 50% of total cover: 20% of total cover: 0 x 2 = FACW species Sapling/Shrub Stratum (Plot size: 15 feet 0 _ x 3 = FAC species 65 FACU species x 4 = UPL species 0 x 5 = Column Totals: 65 (A) Prevalence Index = B/A = 4.0**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 0 = Total Cover 3 - Prevalence Index ≤3.01 50% of total cover: 0 20% of total cover: 4 - Morphological Adaptations¹ (Provide supporting Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) 1. Poa pratensis / Kentucky blue grass **FACU** 15 Yes FACU 2. Trifolium repens / White clover ¹Indicators of hydric soil and wetland hydrology must 10 FACU 3. Plantago major / Common plantain be present, unless disturbed or problematic. 4. Taraxacum officinale / Red seeded dandelion, Common dan 5 FACU **Definitions of Four Vegetation Strata** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 8. more in diameter at breast height (DBH), regardless of 10. Sapling/Shrub - Woody plants, excluding vines, less = Total Cover than 3 in. DBH and greater than or equal to 3.28 ft (1 m) 50% of total cover: 20% of total cover: 13 Woody Vine Stratum (Plot size: 30 feet) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 0 = Total Cover 50% of total cover: 0 20% of total cover: 0 Hydrophytic Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 66-W003-1U

	iption: (Describe to t	he depth nee			or confirm	the absen	ce of indicator	rs.)		
Depth (inches)	Matrix Color (moist)	0/		Features	Tunc1	1 002	Touture		Domorka	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-4	10YR 3/2	100					Silt Loam	Gravei rei	fusal at 4 inches	
						<u> </u>				
¹Type: C=Cor	centration, D=Depletion	n, RM=Reduc	ed Matrix, MS=Mask	ked Sand Gr	ains.		²Loca	ation: PL=P	ore Lining, M=Matrix.	
Hydric Soil II	ndicators:						Indicator	s for Proble	ematic Hydric Soils ³	:
Histosol	(A1)		Dark Surfa	ce (S7)			2	cm Muck (A	A10) (MLRA 147)	
	ipedon (A2)			Below Surfac	e (S8) (MI	RA 147 1		•	Redox (A16)	
Black His				Surface (S9)	. , .		— °	(MLRA 14		
						7, 140)	Ь	•	•	
	n Sulfide (A4)			yed Matrix (F	-2)		_ P		oodplain Soils (F19)	
	Layers (A5)		Depleted M		2)			(MLRA 13	•	
	ck (A10) (LRR N)			k Surface (F	•			-	Dark Surface (TF12)	
	Below Dark Surface (A11)		ark Surface			_ °	ther (Explai	in in Remarks)	
Thick Da	rk Surface (A12)		Redox Dep	ressions (F8	3)					
Sandy M	ucky Mineral (S1)		Iron-Manga	anese Masse	s (F12)					
(LRR N,	MLRA 147,148)		(LRR N, M	LRA 136)						
Sandy G	leyed Matrix (S4)		Umbric Sur	face (F13)	(MLRA 136	, 122)	3Indica	tors of hydr	rophytic vegetation an	d
 Sandy R	edox (S5)		Piedmont F	loodplain Sc	oils (F19) (N	ILRA 148)	w	etland hydr	ology must be presen	t.
	Matrix (S6)			t Material (F2					bed or problematic.	
					(
Restrictive L	ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil F	Present?	Yes No	X
	,									
Remarks:										
(Gravel refusal.									

Project/Site:	Bright Mountain Solar	City/County:	Hazard, Perry C	County	Sampling Date:	05/24/2023
Applicant/Owner:	Avangrid Renewables,	LLC	Stat	e: Kentucky	Sampling Point:	66-W003-1W
Investigator(s):	JB SB	Section, Township,	Range:	Cit	y of Hazard	
Landform (hillslope, terrace, etc	c): Hill seep	Local relief (concave		convex	Slope	e (%): 15-25
Subregion (LRR or MLRA):		37.294264	Long:	-83.253403	B Datu	m: WGS 84
Soil Map Unit Name:	Shelocta-Cutshin-Gilpin complex, 20 to			NWI classification		
	ons on the site typical for this time of year?			xplain in Remark		
		tly disturbed?	Are "Normal Circu	•	•	X No
	, or Hydrologysignificant		(If needed, explai	•		<u> </u>
	S - Attach site map showing sa		,	-		
			itions, transect	s, important	eatures, etc.	
Hydrophytic Vegetation Prese		-				
Hydric Soil Present?	Yes X No		impled Area			
Wetland Hydrology Present?	Yes <u>X</u> No	within a	Wetland?	Yes X	No	<u> </u>
Remarks:						
	into intermittent stream.					
HYDROLOGY						
Wetland Hydrology Indicator	ors: of one required: check all that apply)			Secondary Indica	tors (minimum of	two required)
X Surface Water (A1)		c Plants (B14)			Cracks (B6)	two required)
		ulfide Odor (C1)			getated Concave	Curfoos (DO)
_ · · /	<u> </u>	` ,	D4- (OO)		•	Surface (Do)
X Saturation (A3)		izospheres on Living F	R00ts (C3)	X Drainage Pa		
Water Marks (B1)		Reduced Iron (C4)		Moss Trim L	, ,	
Sediment Deposits (B2)		Reduction in Tilled So	ils (C6)		Water Table (C2)	
Drift Deposits (B3)	Thin Muck S	, ,		Crayfish Bur	, ,	
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)		Saturation V	isible on Aerial Im	nagery (C9)
Iron Deposits (B5)				Stunted or S	tressed Plants (D	1)
Inundation Visible on Ae	erial Imagery (B7)			Geomorphic	Position (D2)	
Water-Stained Leaves (I	B9)			Shallow Aqu	itard (D3)	
Aquatic Fauna (B13)				Microtopogra	aphic Relief (D4)	
				X FAC-Neutra	Test (D5)	
F: 1101 #						
Field Observations:	V V N 5 11 (1)					
Surface Water Present?	Yes X No Depth (inc		•			
Water Table Present?	Yes X No Depth (inc		.			
Saturation Present?	Yes X No Depth (inc	hes): 0	Wetland Hydro	ology Present?	Yes X	No
(includes capillary fringe)						
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos.	previous inspections)	if available:			
Docombo Hodorada Data (c.i.)	oan gaage, memering wen, aena prietee,	p. 6 1. 6 de m. 6 pe 6 de 1. 6),	aranabio.			
Remarks:						