

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 1:

Provide the width and weight limit ratings of all roads proposed to be used during the delivery and construction phase of the project.

Response:

The width and weight limit ratings for the roads anticipated to be used during delivery and construction phases of the Project are as follows.

- KY 80 (AAA): Four 12-foot lanes with 10-foot paved shoulders and 14-foot raised mountable median; 80,000 lb. maximum load.
- KY 476 (AAA route, MP 1.905-22.275): 20-foot lane width with 0-3-foot paved shoulders; 80,000 lb. maximum load.
- KY 1087 (AAA route, MP 0-0.8): 20-foot lane width with no paved shoulders; 80,000 lb. maximum load.
- Starfire Haul Road is a private road and thus is not in the county road system.

Responding Witness: Brian Patton

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 2:

Provide the current condition of all roads expected to be used during the delivery and construction phase of the project.

Response:

The current condition for the roads anticipated to be used during delivery and construction phases of the Project are as follows.

- KY 80: pavement is in good condition.
- KY 476: pavement is in good condition overall, with some breaks in certain areas.
- KY 1087: pavement was recently resurfaced with some edge breaks.

Responding Witness: Brian Patton

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 3:

Provide the width and weight limit ratings of all bridges and culverts within a two-mile radius of the project.

Response:

The width and weight limit ratings for bridges and culverts within a two-mile radius of the Project are as follows.

- 097B00054N: culvert on KY 1087 at MP 0.7, 32 inches wide, and no weight limit.
- 097B00144N: bridge on KY 476 at MP 12.43, 26.25 feet wide, and no weight limit.

Responding Witness: Brian Patton

STMO Bn, LLC (Starfire)
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Request No. 4:

Describe any repairs or upgrades that will need to be made to any roads prior to the delivery and construction phase of the project.

Response:

At this time, Starfire does not anticipate any repairs or upgrades to public roads prior to deliveries or the Project's construction phase. Project representatives will continue communications with county and state officials regarding road conditions prior to deliveries and throughout the construction phase.

Responding Witness: Brian Patton

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 5:

Describe any repairs or upgrades that will need to be made to any bridges or culverts prior to the delivery and construction phase of the project.

Response:

At this time, Starfire does not anticipate that any repairs or upgrades to bridges or culverts are needed prior to deliveries or the Project's construction phase. Project representatives will continue communications with county and state officials regarding bridge and culvert conditions prior to deliveries and throughout the construction phase.

Responding Witness: Brian Patton

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 6:

Provide the maximum expected load weights for each type of delivery truck, including cement and water trucks, heavy equipment, gravel for access roads, panels, inverters, and the transformer.

Response:

Maximum expected load weights for delivery trucks will vary depending on the type of material or equipment being transported. All deliveries will comply with KYTC regulations and applicable roadway weight limits. At this time, anticipated truck types and weight loads are as follows:

- Cement and water trucks with anticipated weight limits up to 80,000 lbs. (fully loaded);
- Weight limits for heavy equipment transport vary based on the specific equipment being transported, but the Project will coordinate with KYTC District 10 for appropriate permitting if loads exceed 80,000 lbs.;
- Gravel for access roads will be delivered via standard dump trucks with anticipated weight limits up to 80,000 lbs.; and,
- Solar panels and inverters will be delivered via standard flatbed or semi-truck with anticipated weight limits up to 80,000 lbs.
- Delivery of the Project substation transformer is addressed in Response No. 7 below.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
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Request No. 7:

Provide the estimated weight of the project's required substation transformer and the truck class necessary for its delivery.

Response:

At this time, the anticipated transformer weight is approximately 300,000 lbs. Per best practices and following KYTC heavy haul requirements, Starfire plans to deliver the transformer using an engineered trailer solution that minimizes per axle weight to less than 40,000 lbs. Class 8 truck is anticipated to be used for delivery.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 8:

Explain whether any oversize or overweight deliveries will require special permits from the County Road Departments or the Kentucky Department of Transportation.

Response:

Project representatives have communicated with local county officials and the Kentucky Department of Highways District 10 regarding road use for site deliveries and to determine what, if any, special permits will be necessary. If required, Starfire will apply for any necessary over-size/over-dimensional permits or temporary road closures. Of note, the county roads around the site are used daily for hauling coal.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
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Request No. 9:

Explain whether any traffic stoppages will be necessary to accommodate large truck deliveries for the project and/or for constructing the project transmission line. If yes, provide the expected locations, frequency, and length of those stoppages.

Response:

It is anticipated that traffic stoppages may be necessary to accommodate large trucks deliveries. The proposed routes for these deliveries will mainly utilize state roads and highways to travel to the Project site. Frequency and length of any stoppage will be discussed with local county officials to ensure that ensure that construction-related traffic resulting from the Project will be minimized and appropriately permitted where necessary.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 10:

Provide a one-page directional map showing highlighted anticipated delivery routes for the project.

Include on the map: access roads, access points, existing roads, bridges, electric generation components, and all structures within two miles of the project.

Response:

See attached.

Responding Witness: Annie Winter

**Starfire Solar Project
Knott, Perry, and Breathitt Counties,
Kentucky**

**Item 10: Preliminary Construction
Routes Map**


LEGEND

-  Bridges
-  Potential Construction Travel Routes
-  Proposed Substation
-  Proposed Access Road
-  Proposed Inverters
-  Proposed Fenced Area
-  Proposed Internal Access Road
-  Proposed Solar Panels
-  Proposed Project Area
-  2-Mile Buffer
-  Structures

Note:
Information shown on this map is compiled from numerous sources, may not be complete or accurate, is intended for planning only, is not suitable for construction, and is supplied without representations or warranties of any kind.

Data Sources:
ESRI Aerial Imagery 2024

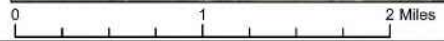
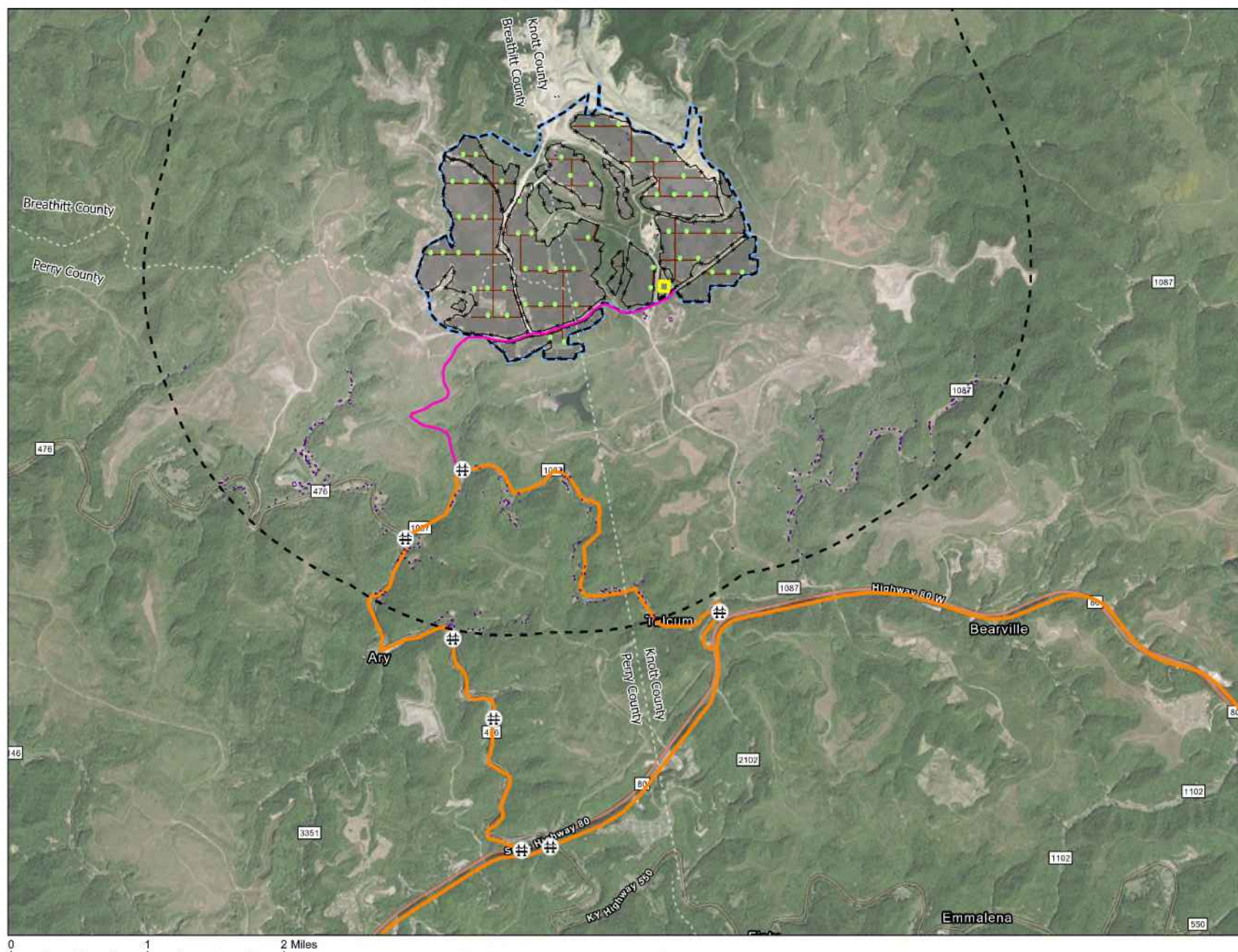
Prepared for: STMOBn, LLC
Prepared by: Tetra Tech GIS Team (NB)
Updated: 3/31/2025



N

NOT FOR CONSTRUCTION

Spatial Reference
NAD 1983 StatePlane Kentucky South FIPS 1602 Feet



STMO Bn, LLC (Starfire)
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Request No. 11:

Provide a narrative description of all proposed vegetative clearing. Include in the response the total anticipated acreage of vegetative clearing.

Response:

Vegetation clearing will be completed using a variety of techniques selected to match current site conditions. Forested areas on relatively smooth terrain will be cut using traditional tree harvesting practices (feller-bunchers, skidders, hydroaxes, etc.), whereas areas on rocky and variable terrain may be cleared using bulldozing techniques targeted to smooth out the terrain and push vegetation into piles. Non-forested, woody vegetation areas such as shrub habitat will be removed through bulldozing and recontouring and physical removal by cutting or chipping down to ground level, followed by recontouring. Areas vegetated with grasses and other herbaceous vegetation will be graded, when required. These areas, and all graded areas, will be treated with a seed mix to establish appropriate ground cover and attain site stabilization. See Application Exh. J, SAR para. 18. It is anticipated that approximately 152 acres of forest habitat and 1,233 acres of other, non-forested vegetation will be removed during construction.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 12:

Explain how the project has been designed to minimize the amount of tree clearing required.

Response:

Avoidance and minimization of tree clearing for the Project has occurred on several scales. First, it is located on a former coal mine and inherently has limited areas of forested habitat compared to a similarly-sized area that has not had a similar disturbance history. Second, during the design of the Project, great care was taken to locate panel arrays in open, clear areas; and forested areas on the site were incorporated, to the extent practicable, into the wildlife corridors that will be established at the site. Finally, as an offset to unavoidable tree clearing, the Project has proposed to reforest at least 25 acres of habitat through tree plantings. See Application Exhibit J, SAR para. 18. The final location and configuration of that acreage will be based on site conditions and soil suitability.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 13:

Provide a map showing all planned areas of vegetative clearing. Include on the map satellite imagery, wetland features, and elevation contours.

Response:

See attached.

Responding Witness: Annie Winter

Starfire Solar Project
Knott, Perry, and Breathitt Counties,
Kentucky

Item 13: Proposed Vegetative
Clearing

LEGEND

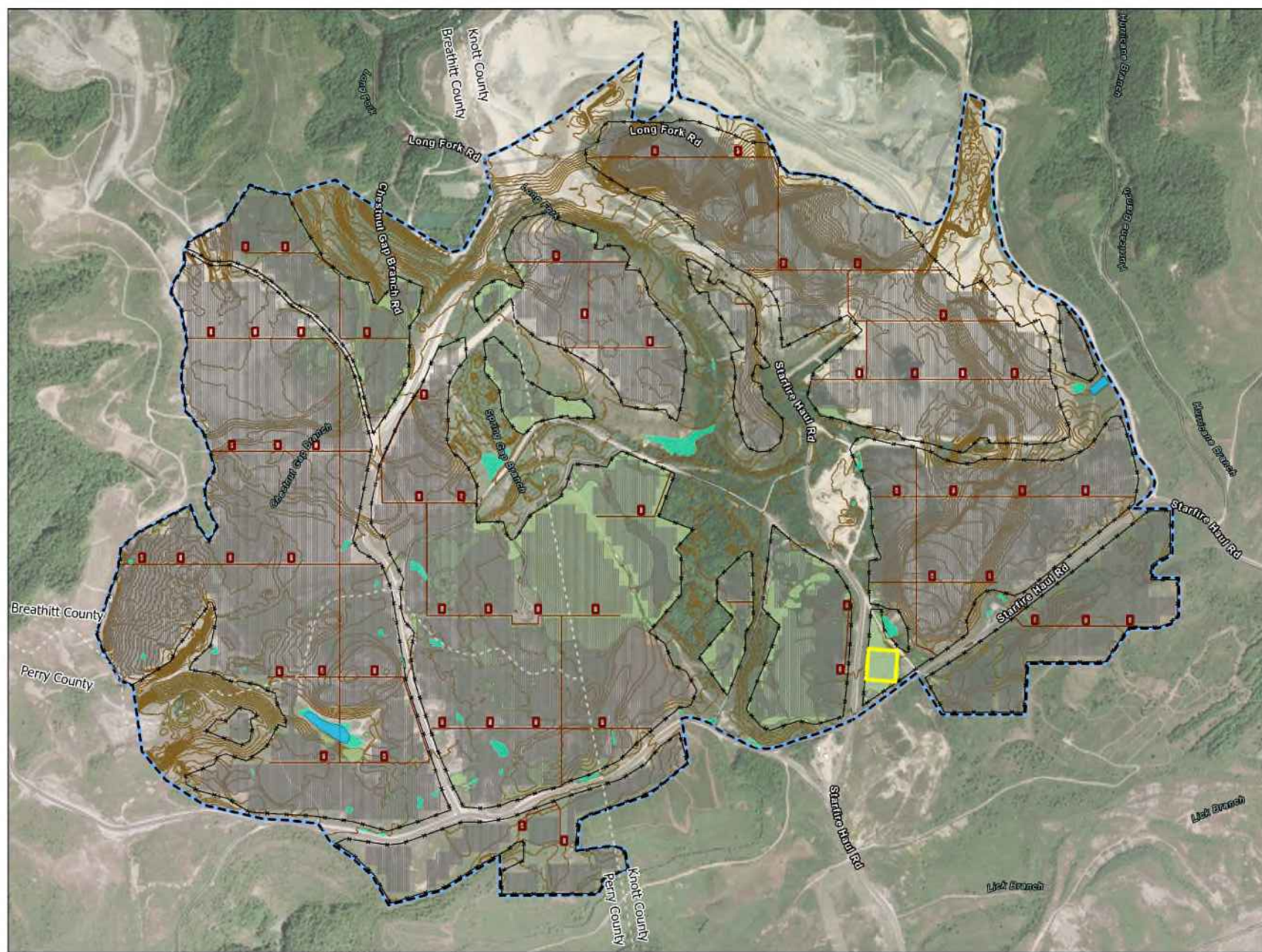
-  Contour (10-ft)
-  Proposed Project Area
-  Delineated Ponds
-  Delineated Wetlands
-  Substation
-  Inverters
-  Access Road
-  Proposed Vegetation Clearing Areas
-  Proposed Solar Panels
-  Proposed Fenced Area

Data Sources:
 ESRI Aerial Imagery 2024; Kentucky
 Department of Geographic Information 2018;
 BFW Engineering & Testing, Inc. Field
 Delineation 2024

Prepared for: STMOBn, LLC
Prepared by: Tetra Tech GIS Team (NB)
Updated: 3/31/2025



Spatial Reference
 NAD 1983 StatePlane Kentucky South FIPS 1602 Feet



0 2,000 4,000 US Feet

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 14:

Explain how Starfire will address the possibility of displaced wildlife as a result of vegetative clearing.

Response:

The Project has proposed the development of wildlife corridors through the site, retention of as much existing forest habitat as reasonably practicable, and reforestation of at least 25 acres of land.

The Project has also proposed establishing at least 10 acres of pollinator habitat into the final site design. See Application Exhibit J, SAR para. 18.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 15:

Provide a detailed table listing all residential structures located within 2,000 feet of the project boundary line. For each structure, provide:

- a. The distance to the boundary line.
- b. The distance to the closest solar panel.
- c. The distance to the nearest inverter.
- d. The distance to the substation.

Response:

- a. No residential structures are within 2,000 feet of the Project boundary line.
- b. See Response No. 15(a) above.
- c. See Response No. 15(a) above.
- d. See Response No. 15(a) above.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 16:

Provide a detailed table listing all non-residential structures located within 2,000 feet of the Project boundary line. For each structure, provide:

- a. The distance to the boundary line.
- b. The distance to the closest solar panel.
- c. The distance to the nearest inverter.
- d. The distance to the substation.

Response:

- a. See attached.
- b. See Response No. 16(a) above.
- c. See Response No. 16(a) above.
- d. See Response No. 16(a) above.

Responding Witness: Annie Winter

Structure Type	Distance to Boundary (ft)	Distance to Panel (ft)	Distance to Inverter (ft)	Distance to Substation (ft)	Longitude	Latitude
Industrial Building	183	389	947	1,025	-83.11455	37.40265
Industrial Building	298	481	1,022	1,060	-83.11425	37.40239
Industrial Building	391	596	1,143	1,185	-83.11444	37.40208
Industrial Building	0- Within Project Boundary	104	604	2,722	-83.10734	37.41269
Industrial Building	0- Within Project Boundary	242	701	2,251	-83.11332	37.41209
Industrial Building	0- Within Project Boundary	244	783	3,700	-83.12141	37.41309
Out Building	0- Within Project Boundary	241	674	2,536	-83.11945	37.41

STMO Bn, LLC (Starfire)
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Request No. 17:

Refer to the Kentucky Geological Survey Oil and Gas Wells Search (<https://kgs.uky.edu/kygeode/services/oilgas/>).

- a. File a map identifying all active and inactive oil or gas wells on the proposed site. Also include any gas-gathering pipelines associated with the wells.
- b. Determine and explain whether any of these wells are currently permitted and active. If active, identify the wells as such on the map provided in response to Item 17(a).
- c. Explain whether the existence of oil and gas wells and pipelines will require adjustments to the proposed location of solar panels.

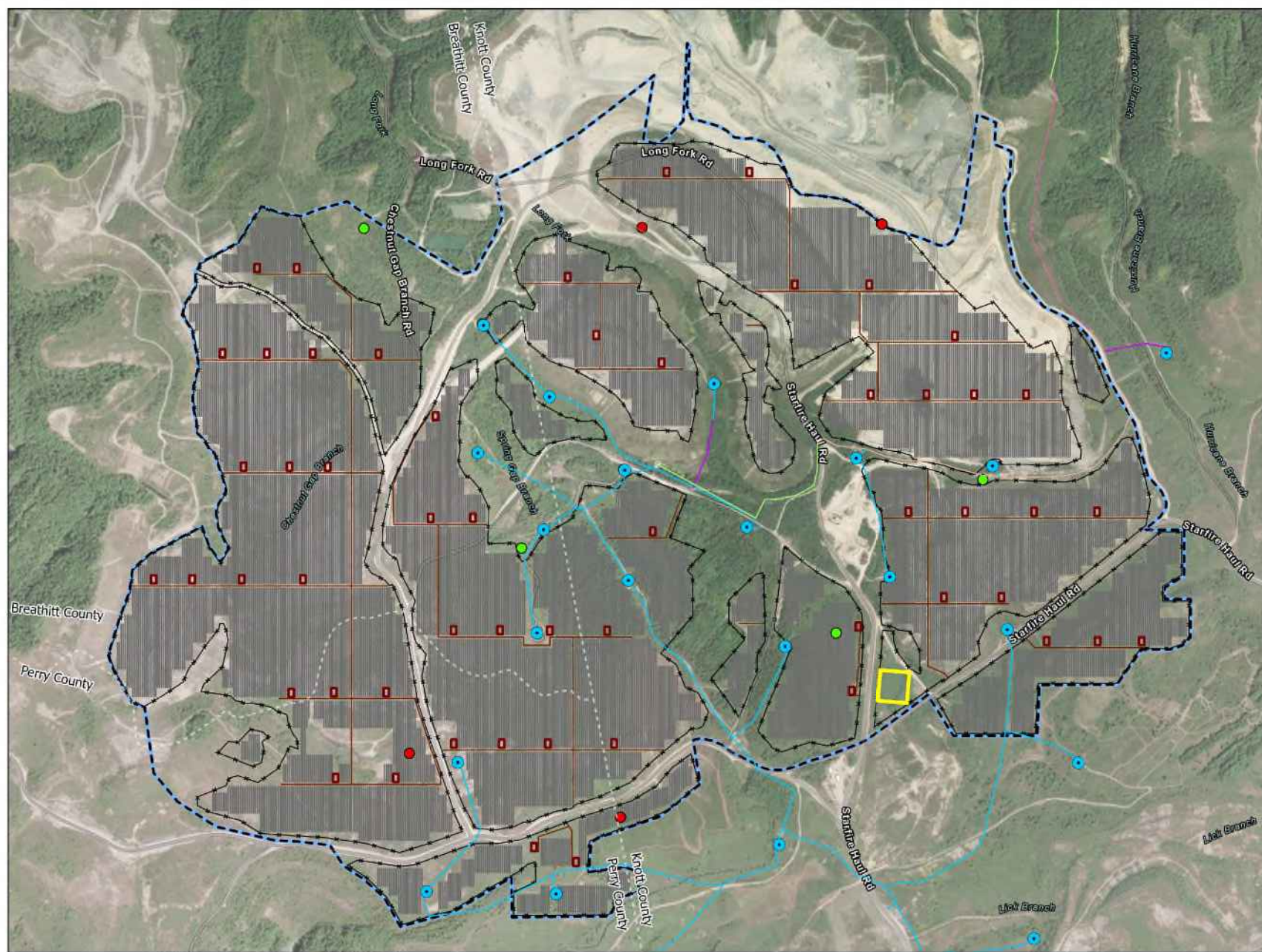
Response:

- a. See attached.
- b. See map provided in response to 17(a) for any currently permitted and active wells based on the KGS website.
- c. There is at least one well that may require adjustments to the proposed location of panels. It is anticipated that some wells may be inactive by the time construction commences. Project representatives plan to communicate with well owners regarding these well locations within the next several months.

Responding Witness: David Gil

**Starfire Solar Project
Knott, Perry, and Breathitt Counties,
Kentucky**

Item 17a: Oil & Gas Wells



LEGEND

- Substation
- Inverters
- Proposed Project Area
- Proposed Solar Panels
- Access Road
- Proposed Fenced Area
- Kentucky Oil & Gas Wells
 - Active Well - Permitted
 - Inactive Well - Previously Permitted
- Vinland Surveyed Gas Wells
 - Vinland Gas Wells Surveyed
- Pipelines
 - Vinland 3 inch gas line surveyed
 - Vinland 3 inch gas line not surveyed
 - Vinland 4 inch gas line surveyed
 - Vinland 4 inch gas line not surveyed
 - Vinland 6 inch gas line surveyed

Data Sources:
ESRI Aerial Imagery 2024; Kentucky Geological Survey 2024; BrightNight 2025

Prepared for: STMOBn, LLC
Prepared by: Tetra Tech GIS Team (NB)
Updated: 3/31/2025



Spatial Reference
NAD 1983 StatePlane Kentucky FIPS 1600 Feet

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 18:

Provide the total length of cabling to be used in the projects' collection system.

Response:

At this time, approximately 28,000 linear feet of collection cables is anticipated for the Project's collection system.

Responding Witness: Colin Cannon

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 19:

Explain if the medium voltage (MV) collection system will be underground, above ground, or both. If the MV collection system will be underground and above ground, provide a map that shows which segments are underground and which segments are above ground.

Response:

At this time, the Project anticipates its MV collection system to be entirely underground, unless site conditions necessitate any above ground collection.

Responding Witness: Colin Cannon

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 20:

Provide information on any fiber optic or communication network installed as a part of the project and any excavation that may be required for the installation. Include in the response a diagram or map depicting the location of the fiber optic or communication network for proposed project.

Response:

It is anticipated at this time that fiber optic will be installed above or below ground along the same routes as the proposed gen-tie and MV collection circuits. Please refer to the site layout for the indicative proposed gen-tie and collection routes where the fiber optic will be installed. The proposed gen-tie route is subject to change pending Starfire's separate transmission line application to the Siting Board.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 21:

Explain whether construction activities will occur sequentially or concurrently across the project site.

Response:

Construction activities will occur sequentially and concurrently across the Project site. Construction will occur sequentially in a given area to complete any clearing and grading activities before commencing installation of Project components. Construction activities will occur concurrently in that multiple areas of the site will commence construction activities simultaneously. The particular construction activity or set of activities needed on a given portion of the Project depends on the area's existing natural features and the extent of work required to prepare the land for installation of Project components.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 22:

Explain how the proposed transmission route was determined.

Response:

Approval for the proposed transmission line will be a separate application to the Siting Board, but Starfire has included a preliminary proposed route on its site layout. The proposed transmission route is being sited to support the following goals: (1) locate the solar facility's collector substation in the central portion of the Project; (2) minimize the distance between the Project's gen-tie to the point of interconnection; and (3) install poles in locations that minimize impact to neighboring properties and regulated or sensitive natural resources while ensuring safe and accessible pole locations for long-term operation.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 23:

Identify on a map all churches or other religious facilities within a two-mile radius of the project.

Provide the corresponding distances from the facility to the closest site boundary.

Response:

One religious facility identified as New Bethlehem Old Regular Baptist Church is within two miles of the Project boundary. It is located approximately 1.89 miles from the Project's boundary.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 24:

Provide any communication with any churches or other religious facilities regarding the project.

Provide a summary of any concerns that were raised.

Response:

Project representatives have not communicated with any representatives of the New Bethlehem Old Regular Baptist Church to date but will initiate communications in the next several months to discuss any potential concerns from church leadership regarding the Project.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

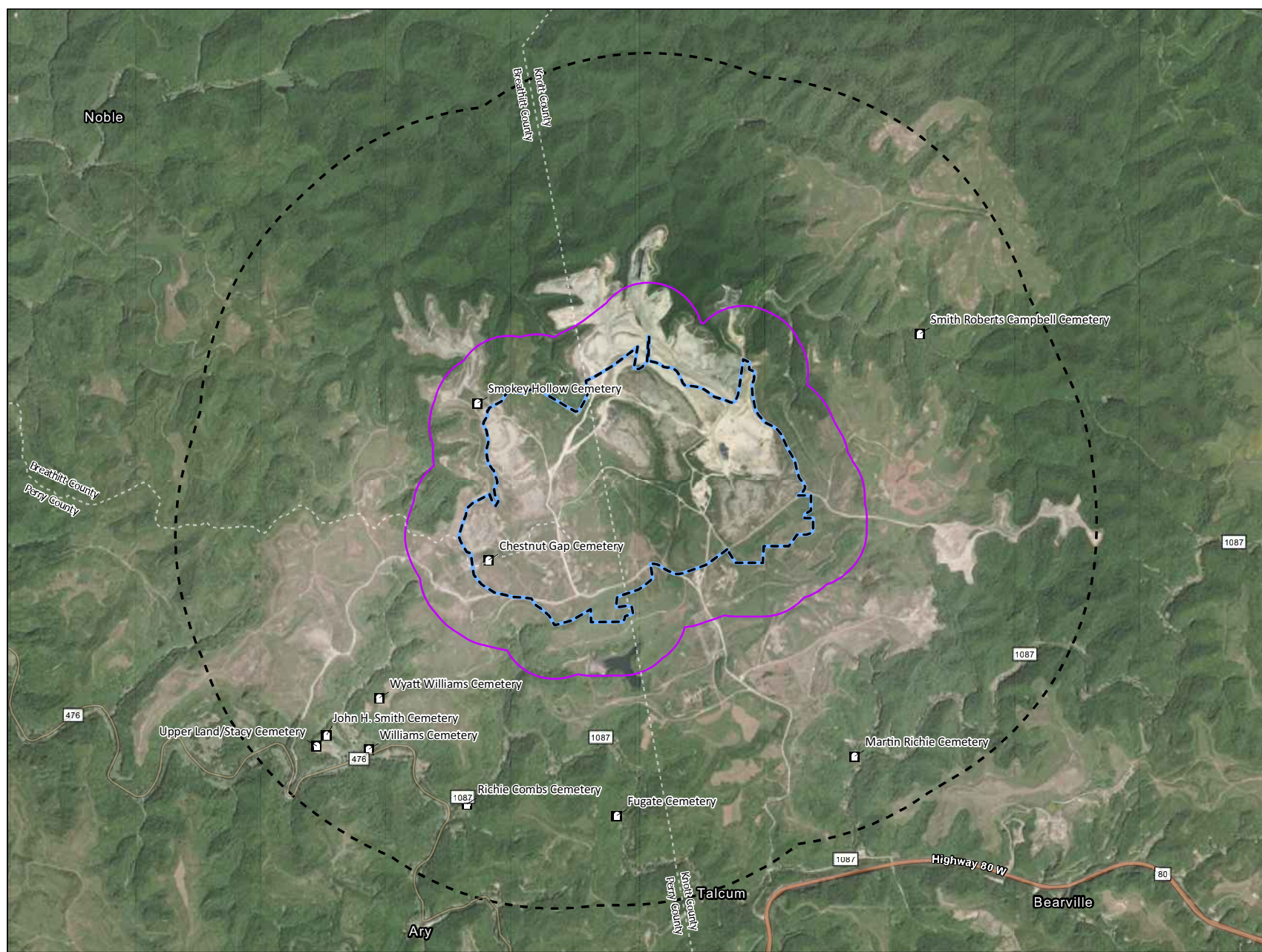
Request No. 25:

Identify all cemeteries located within a two-mile radius of the project on a map and identify if the project will restrict access to them in any way.

Response:

See attached. Nine cemeteries have been identified within two miles of the Project. Of these, two cemeteries may be subject to restricted access: Chestnut Gap Cemetery, located within the Project boundary; and Smokey Hollow Cemetery, which is located outside the boundary but within 2,000 feet of the Project site. The remaining seven cemeteries will not be subject to restricted access: Williams Cemetery, Smith Robers Campbell Cemetery, Upper Land/Stacy Cemetery, Wyatt Williams Cemetery, Richie Combs Cemetery, Martin Richie Cemetery, and John H. Smith Cemetery.





Responding Witness: Annie Winter



Starfire Solar Project
Knott, Perry, and Breathitt Counties,
Kentucky

Cemeteries

LEGEND

-  Cemetery
-  2-Mile Buffer
-  2000-ft Buffer
-  Proposed Project Area

Data Sources:
 ESRI Aerial Imagery 2024, FedMap 2024

Prepared for: STMOBn, LLC
Prepared by: Tetra Tech GIS Team (KM)
Updated: 3/25/2025



0 1 2 Miles

Spatial Reference
 NAD 1983 StatePlane Kentucky South FIPS 1602 Feet

Path: V:\GIS\Projects\GIS\Projects\Starfire\Starfire\MapDocs\NCSB_DataRequest_Response.aprx

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 26:

Provide a narrative description of the location of each laydown area to be used during construction.

Response:

Laydown areas will utilize typically the flattest tracts within the site area. It is anticipated that the primary laydown area is anticipated to be approximately 15 acres, located 1,500 feet northeast of the collector substation, and directly adjacent to the primary site access road. This area provides the easiest access for delivery trucks while minimizing the need for additional grading work.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 27:

Provide a narrative description of the location to each of the following site features:

- a. Each construction entrance.
- b. Each entrance to be used in operations.
- c. Operation & Maintenance (O&M) area.
- d. Each laydown area.

Response:

- a. Refer to Application Exhibit C. There will be a single entrance for construction, operations, and maintenance. The entrance is marked as "Guard Shack" on the Project's site layout map located on an existing access road off of Balls Fork Road (KY-1087).
- b. See Response No. 27(a) above.
- c. The Project plans to locate an O&M office for personnel and storage Starfire Haul Road near the Project's substation. An existing single story office building adjacent to the planned substation may be utilized.
- d. See Response No. 26 for descriptions of laydown areas.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 28:

Provide a list of permits that will be required from any other local, state, or federal agencies for the project. Include in the response the status of those permits.

Response:

See the attached table of potential permit authorizations that may be required for Project development. All necessary air, water, and waste permits and authorizations will be obtained prior to commencing construction. The Project's final site design will determine which permits will be required for Project development.

Responding Witness: Bob Roy

Permit/Approval	Permitting Authority	Activities	Likelihood to Obtain	Permit Submittal Status
Federal				
Clean Water Act Sec. 404 and/or Section 10 Permit(s)	U.S. Army Corps of Engineers (USACE)	Placement of Dredge or Fill Material in a Waters of the U.S.	To be Determined	Not yet submitted.
Endangered Species Act Section 7 Consultation	U.S. Fish and Wildlife Service (USFWS)	Federal Endangered Species Act-Listed Species and/or Critical Habitat presence; Section 7 Consultation is required if a federal permit or other federal action is required, or the project involves federal funding.	To be Determined	Not yet submitted.
Bald and Golden Eagle Protection Act (BGEPA) of 1940, as amended	USFWS	Required for Federal agencies authorizing, funding, permitting, or carrying out an action. Prohibits the take of bald and golden eagles without prior authorization by the USFWS. Take includes the killing, injuring, or disturbing of present or nesting eagles.	To be Determined	Not yet submitted.
Notice Criteria Tool and Determination	Federal Aviation Administration (FAA)	Filing with the FAA must occur prior to construction if certain height, location, frequency, or slope criteria are met or if filing has been requested by the FAA.	Low	Not yet submitted.
National Historic Preservation Act (NHPA) Section 106	Kentucky Heritage Council — State Historic Preservation Office (KHC-SHPO)	Required if federal permit is required or the project involves federal funding. May require cultural site surveys and historic properties analysis.	To be Determined	Not yet submitted.
Spill Prevention, Control, and Countermeasures (SPCC) Plan	U.S. Environmental Protection Agency (EPA)	Before a facility is subject to the SPCC Rule, it must meet three criteria: 1) it must be nontransportationrelated; 2) it must have an aggregate aboveground storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons; and 3) there must be a reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines.	High	Not yet submitted.
State				
Kentucky Endangered Species Protection	Kentucky Department of Fish and Wildlife Resources (KDFWR)	Take of a Kentucky-listed endangered or threatened species.	To be Determined	Not yet submitted.
Construction Certificate	Kentucky State Siting Board	Construction of electric generating facilities and transmission lines that are not regulated by the Kentucky Public Service Commission.	Required	Application filed on 2/4/2025
Plan Review	Kentucky Dept. of Housing, Buildings and Construction	New construction or renovations - Plan review needed to obtain a building permit.	Required	Not yet submitted.
Certificate of Occupancy	Kentucky Dept. of Housing, Buildings and Construction	Issued when construction is found to be in compliance with all applicable building codes and regulations.	Required	Not yet submitted.
Federal Water Pollution Control Act/Kentucky Pollutant Discharge Elimination System (KPDES)	Kentucky Energy & Environment Cabinet (EEC), Division of Water (DOW)	All discharges to waters of the Commonwealth of Kentucky.	Required	Not yet submitted.
Kentucky KYR100000 Construction General Permit for Discharges from Construction Activities	Kentucky EEC, DOW	Stormwater runoff from construction areas greater than 1 acre.	Required	Not yet submitted.
Section 401 Water Quality Certification	Kentucky EEC, DOW	Any work or deposit/placement of dredged or fill material in streams or wetlands.	To be Determined	Not yet submitted.
State Floodplain Construction General Permit	Kentucky EEC, DOW	All construction across, along, or adjacent to a stream (i.e., the base floodplain) or in the floodway of a stream for which a construction permit is required pursuant to KRS 151.250, 44 C.F.R. Part 6, and 44 C.F.R. 64.3.	To be Determined	Not yet submitted.
Overweight/Over-dimensional permit(s)	Kentucky Transportation Cabinet (KYTC)	Transportation and use of oversize and/or overweight vehicles on KYTC roads.	High	Not yet submitted.
Encroachment/Driveway Permit(s)	KYTC	Construction of a driveway within a KYTC right-of-way.	To be Determined	Not yet submitted.
Utility Crossings	KYTC	Utility work within a KYTC right-of-way.	To be Determined	Not yet submitted.
Zoning permit	Kentucky Airport Zoning Commission (KAZC)	All structures built on or near an airport must be approved/permitted by the KAZC. This includes but is not limited to buildings, antenna towers, water towers, electrical power lines (above ground), runway and taxiway extensions, apron expansion, parking lots and construction cranes.	Low	Not yet submitted.
Local				
No local permits required.				

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 29:

Provide copies of any documents submitted to other agencies, other than what is in the application.

Response:

No Project documents have been submitted to other agencies at this time.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
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Request No. 30:

Provide any communication with the Federal Aviation Administration (FAA) or the Kentucky Airport Zoning Commission (KACZ) regarding the project.

Response:

See attached for the FAA Notice Criteria Tool results completed for the Project.

Responding Witness: Bob Roy



Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2018.2.0](#)

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

*** Structure Type:** SOLAR | Solar Panel ▼
 Please select structure type and complete location point information.

Latitude: 37 Deg 23 M 52.49 S N ▼

Longitude: 83 Deg 11 M 37.61 S W ▼

Horizontal Datum: NAD83 ▼

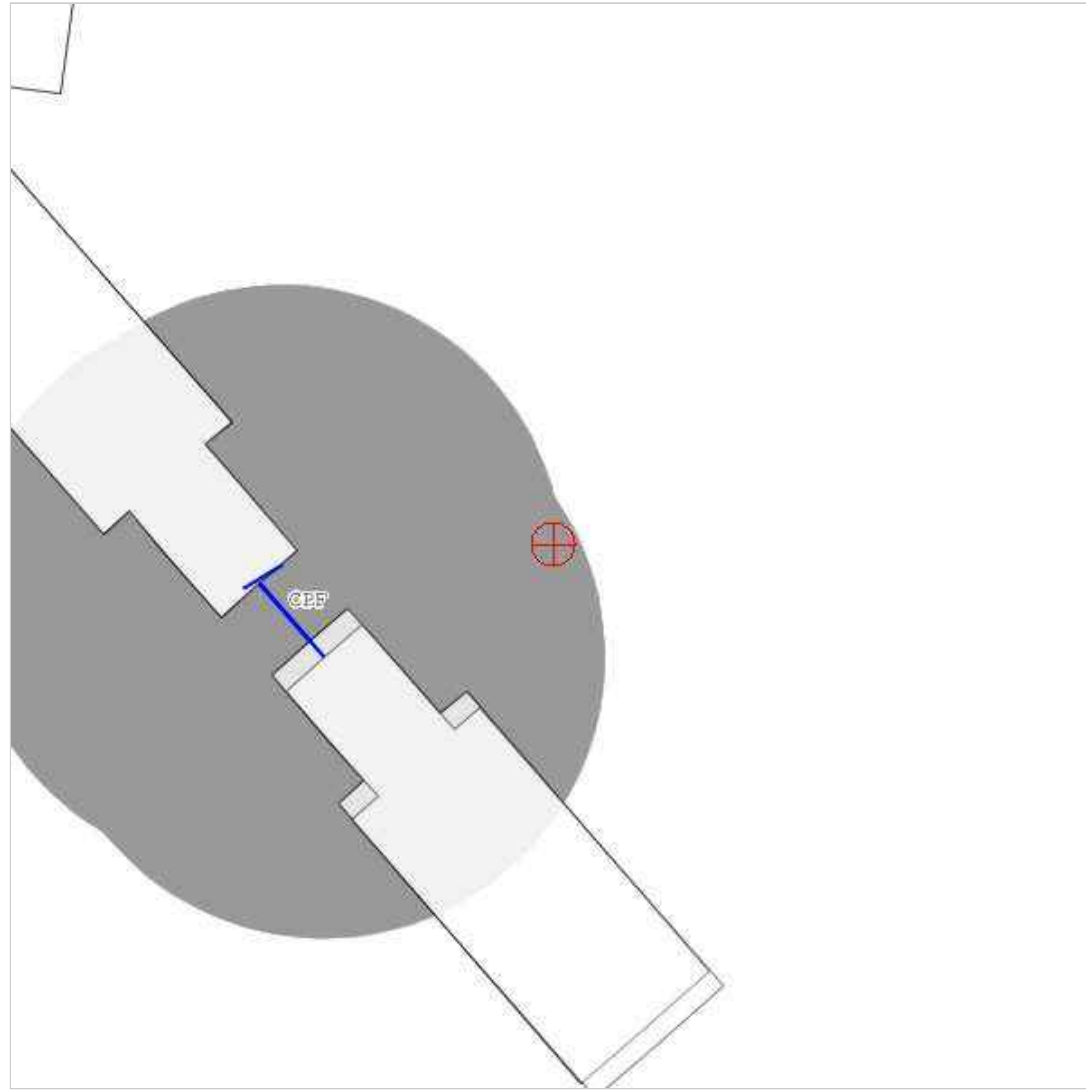
Site Elevation (SE): 1222 (nearest foot)

Structure Height : 20 (nearest foot)

Is structure on airport: No Yes

Results

You do not exceed Notice Criteria.



STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 31:

Explain if an Engineering, Procurement, and Construction (EPC) firm has been selected for the project. Include in the response the request for proposal (RFP) for the EPC contractor.

Response:

An EPC firm has not been selected and an RFP has not been issued at this time.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 32:

Explain whether any existing structures on the project site will be demolished during construction.

Response:

The Project does not anticipate demolishing any existing structures on the Project site.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 33:

Explain whether the project will have a battery storage system. If a battery storage system is going to be utilized, provide the following:

- a. Safety data sheets for the energy storage system.
- b. The environmental impact of the battery storage system.
- c. Expected life of the batteries.
- d. Method to dispose of batteries at the end of the useful life.
- e. How the battery storage system installation will comply with National Fire Protection Association Standard 855.

Response:

- a. No battery energy storage system is proposed for this Project.
- b. See Response No. 33(a) above.
- c. See Response No. 33(a) above.
- d. See Response No. 33(a) above.
- e. See Response No. 33(a) above.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 34:

Provide a narrative description of the proposed transmission line route and any alternate routes, including the number of poles to be installed, the height of the poles and the length and width of the transmission line right-of-way.

Response:

The Project will file a separate application for its nonregulated electric transmission line. Currently, the Project estimates an approximately forty to sixty poles will be required along a total length of approximately five miles located within a right of way width of 200 feet. Pole height is yet to be determined but will be included in the Project's forthcoming transmission line application. Height of poles will be determined at time of the forthcoming transmission line application but this would vary depending on the length of span, location, and topography.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 35:

Provide a map showing the proposed transmission line route, the right-of-way, and the existing property lines that the proposed transmission line is proposed to cross. Include in the response a list of parcel numbers and corresponding property owner names.

Response:

The Project will separately file an application for its nonregulated electric transmission line, which will include requested mapping. The landowners involved with the anticipated transmission line are Liberty Land LLC and Core Natural Resources, formerly known as Arch and ICG Natural Resources, respectively.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 36:

Explain how Starfire proposes to minimize significant adverse impact to the scenic assets of Kentucky with the proposed route of the transmission line.

Response:

It is anticipated that the poles and wires will not be visible to any residential neighbors or commuters traveling on state or county roadways.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 37:

Provide any sketches of the proposed transmission line support structure.

Response:

See Response No. 35 above. None have been designed at this time.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 38:

Explain how the proposed transmission route was determined.

Response:

See Response No. 22 above.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 39:

Identify the gas pipeline included in the legend of the site plan. In the response include the owner of the pipe, diameter of the pipe, and provide a map showing its location within the project boundary.

Response:

The pipelines in the legend of the site plan are owned by Vinland Gas and are narrow diameter (6 inch or less) gas gathering pipelines. Please refer to map provided for Request No. 17 for locations within the project boundary.

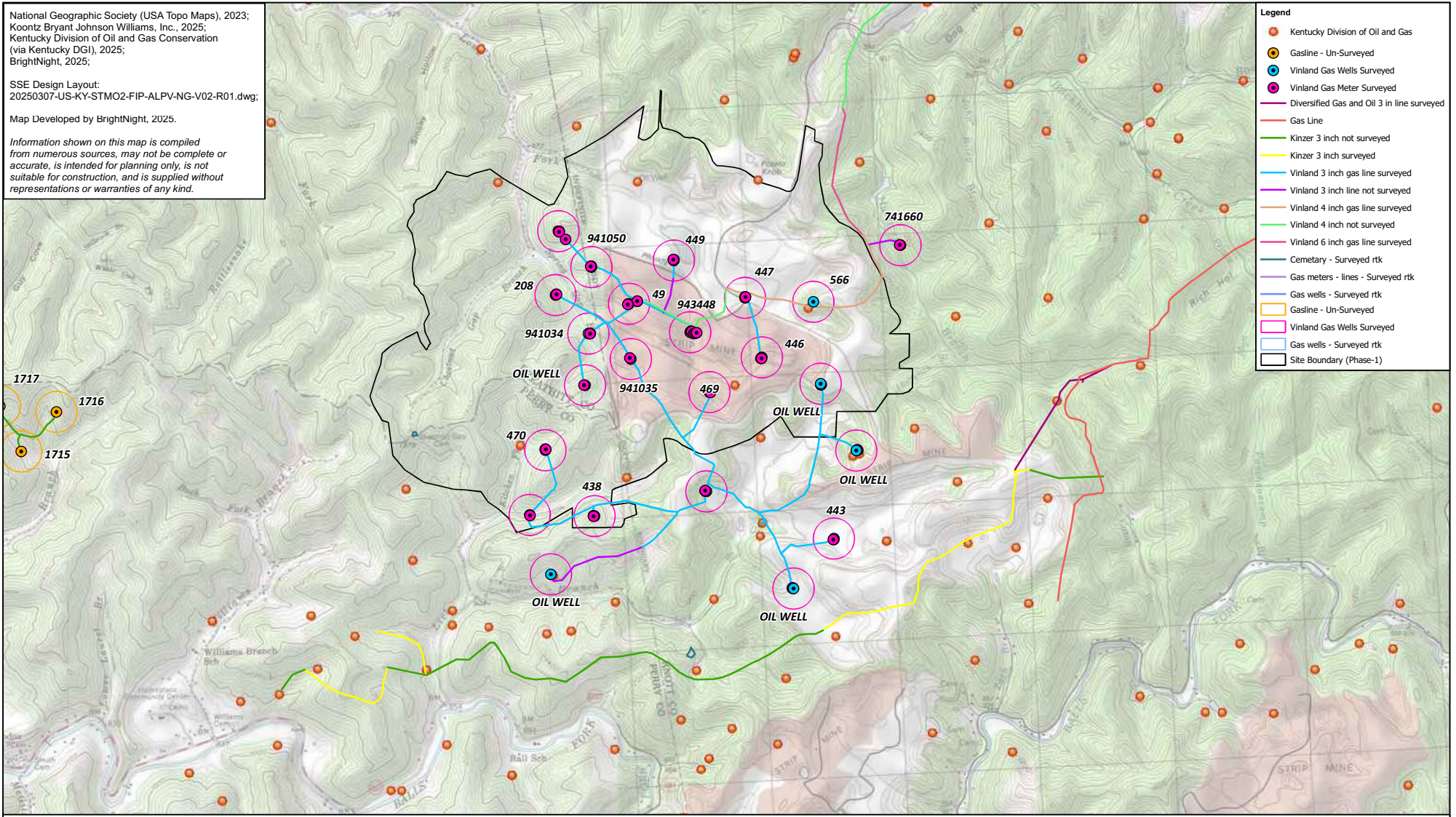
Responding Witness: David Gil

National Geographic Society (USA Topo Maps), 2023;
 Koontz Bryant Johnson Williams, Inc., 2025;
 Kentucky Division of Oil and Gas Conservation
 (via Kentucky DGI), 2025;
 BrightNight, 2025;

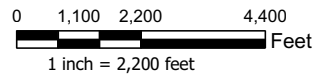
SSE Design Layout:
 20250307-US-KY-STMO2-FIP-ALPV-NG-V02-R01.dwg;

Map Developed by BrightNight, 2025.

Information shown on this map is compiled
 from numerous sources, may not be complete or
 accurate, is intended for planning only, is not
 suitable for construction, and is supplied without
 representations or warranties of any kind.



- Legend**
- Kentucky Division of Oil and Gas
 - Gasline - Un-Surveyed
 - Vinland Gas Wells Surveyed
 - Vinland Gas Meter Surveyed
 - Diversified Gas and Oil 3 in line surveyed
 - Gas Line
 - Kinzer 3 inch not surveyed
 - Kinzer 3 inch surveyed
 - Vinland 3 inch gas line surveyed
 - Vinland 3 inch line not surveyed
 - Vinland 4 inch gas line surveyed
 - Vinland 4 inch not surveyed
 - Vinland 6 inch gas line surveyed
 - Cemetery - Surveyed rtk
 - Gas meters - lines - Surveyed rtk
 - Gas wells - Surveyed rtk
 - Gasline - Un-Surveyed
 - Vinland Gas Wells Surveyed
 - Gas wells - Surveyed rtk
 - Site Boundary (Phase-1)



SURVEYED OIL AND GAS WELLS
 Tuesday, March 25, 2025

Starfire Mountain (STMO)
 Knott, Breathitt, and Perry Co., KY

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 40:

Explain how Starfire will coordinate with local law enforcement and fire services regarding security and emergency protocols during construction and operations.

Response:

Starfire will coordinate with local law enforcement and fire services later in the development process. These activities typically occur once an EPC partner is selected for the Project, as EPCs have established safety programs and their involvement is crucial for effective planning and implementation of such protocols. The Project will plan to engage in project-specific training for local emergency services and first responders. Once an EPC is hired, coordination with emergency service providers will begin for both the construction and operations phase.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 41:

Provide what departments Starfire will coordinate with regarding security and emergency protocols and training during construction and operations.

Response:

Starfire will coordinate with the following emergency personnel: Kentucky State Police Post 13; Knott County Sheriff's Office; Perry County Sheriff's Office; Breathitt County Sheriff's Office; Perry County Fire & Rescue, and Fisty-Dwarf Volunteer Fire & Rescue.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 42:

Provide a brief narrative history of the previously used surface mine.

Response:

The Project site is located on a former surface coal mining site known as Starfire located in Knott, Perry and Breathitt Counties.

Responding Witness: Brian Patton

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 43:

Given its prior use as a surface mining site, provide the reclamation status of the site.

Response:

The site is currently in a multiple phase reclamation process under Liberty Management (DNR Permit No. 860-0563) and Blackhawk Mining (DNR Permit No. 860-0542).

Responding Witness: Brian Patton

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 44:

Given the site was previously used as a surface mine, provide any steps Starfire will take to remediate the site and any special preparations to minimize pollutant discharge.

Response:

The site is currently in a multiple phase reclamation process under Liberty Management KY DNR Permit and Blackhawk Mining Division of Water Permits classified as the KY General Water Discharge Permit. There are numerous vegetative and sediment control structures already in place and monitored daily to address pollutant discharge.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 45:

Explain how the project will be designed to avoid impacts to Waters of the United States (WOTUS) delineated onsite.

Response:

Wetland delineation surveys have been completed on nearly all of the proposed project site and few jurisdictional wetland or stream resources are present. Those WOTUS areas that do occur have been avoided in the proposed Project design. Parts of the Project area that have not yet been surveyed for wetlands, approximately 177 acres, will be surveyed well in advance of the final Project design. Any WOTUS found in those areas will be similarly avoided to the extent practicable. If full avoidance is not possible, Starfire will consult with the U.S. Army Corps of Engineers and the Kentucky Division of Water regarding appropriate Section 404/401 permitting needs and strategy.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 46:

Provide details of the "UK Tree Study" shown on the site plan and what affect it will have on the project.

Response:

The University of Kentucky (UK) has established several research forest plots on the Starfire Mine site to study the how site preparation and tree species selection affects the efficacy of reforestation reclaimed mining areas. Project representatives have consulted with UK about the research plots located in the project area and have incorporated those plots into the proposed wildlife corridor through the site. Additionally, some of the findings from the research completed in these areas will be used to further develop the Project's plan to reforest at least 25 acres of land.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 47:

Describe the proposed fencing, including how it will accommodate local wildlife.

Response:

The proposed fencing will consist of wire fencing with a larger mesh size than typical chain link fencing. This mesh size will likely be 4" x 6" and will allow for the movement of small to medium-sized mammals across the site. Birds, reptiles, and amphibians will be largely unaffected by fencing. Individual panel areas will be fenced separately to allow for movement of larger animals between array areas and the wider wildlife corridor will allow for more natural movement north to south across the site. No barbed wire fencing will be used for the panel array area fences. The substation fence will be 6 feet in height with a 1-foot extension of barbed wire.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 48:

Provide a Cumulative Environmental Assessment (CEA) study for the project.

Response:

A CEA has not been finalized to date because the Project is not seeking any deviation from the Siting Board's 2,000-foot statutory setback requirement.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 49:

Provide any Geotechnical Desktop studies that exist for the project.

Response:

Please find the desktop geotechnical study completed for the Project, dated December 27, 2023, attached separately due to file size limitations.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 50:

Provide a Phase 1 Environmental Site Assessment report for the project.

Response:

Please find the Phase I Environmental Site Assessment that has been completed for the Project site attached separately due to file size limitations. A new Phase I ESA will be commissioned prior to commencing construction.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 51:

Provide a Stream and Wetland Delineation study for the project.

Response:

Two wetland delineation reports that have been completed for the Project site, and are separately attached due to file size limits. As noted in the Response No. 45, additional wetland surveys will be completed for portions of the Project not already surveyed prior to final project design and construction.

Responding Witness: Bob Roy

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 52:

Provide any interconnection agreements that exist in relation to the project.

Response:

Starfire does not yet have an executed interconnection agreement. Starfire originally submitted an Interconnection Request to PJM in 2022 and was assigned to the AG2 interconnection cycle. As such, PJM commenced its interconnection study for Starfire in December 2024 and System Impact Study results are scheduled to be released in September 2025. Please see Application Exhibit H.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 53:

Provide information regarding any public meetings that have occurred regarding the project. Include in the response any materials that were provided, sign-in sheets, and a summary of public comments that were made.

Response:

See attached; see also Application Exhibit F. No public comments were received in the Project's pre-application public meetings.

Responding Witness: David Gil



BrightNight Starfire Solar Project

BrightNight PIM
5123124

— PLEASE SIGN IN —

Name	Mailing Address	Phone Number	Email
Edie Lisk	County treasurer	606-666-3800 ext. 226	Edie.Lisk@outlook.com
Adam R. Choate	Shawport, LA	318-393-8266	Adam.Choate@BrightNightPower.com
Danny Combs	Emmalena, KY	606-854-7077	danny.combs@brightnightpower.com
Virginia Meagher	1902 Patton Ave. Jackson, KY 41339	606-272-2264	vmmeagher@gmail.com
Louise Sizemore	500 Ridgeway Way Hazard, KY 41701	606-438-7560	louisesizemore67@gmail.com
Dana Baxley	1882 McDonald Ferry Rd 41339	704-237-1941	danna_baxley@mccl
Shawn Harley	177 Hazel Lane Jackson KY	606-666-4655	s-harley@bellsouth.net
Susan Harley	177 Hazel Ln, Jackson Ky	606-666-4655	skllosse@yahoo.com
Sheridan Martin	1414 1st Flk Stumbo Hallow Dr. St. Kl / 41619 Jackson	606-451-7177	S_MARTIN_67@fla.com
Edna Anderson	534 Lakeside 41339	606-666-7455	nanaw1947@a4t.net
Rod Gahn	1155 Main Street	666-8812	
Ryan Spicer	1155 Main street	666-8812	
Stacy Trent	1155 Main Street	666-8812	



BrightNight Starfire Solar Project

5/22/24 FLOYD Co. PIM — PLEASE SIGN IN —

Name	Mailing Address	Phone Number	Email
Lester Brashear	PO Box 615 Hazard	223-9972	lbrashear2017@gmail.com
Sherry Euvigal	PO Box 631 Hydun	672-2702	
Gerry Roll			
Kay Crowe	Hazard, KY P.O. Box 2113	(606) 318-8141	
Kristin Collins			
Emi Gendinning			
Scott Alexander	Hazard KY PO Box 714	606 438-9639	
Danna Baxley	1892 McDonald Forg Rd	304-237-1941	danna.baxley@trc.org
Mike Ricci	124 Air Me Jennings Georgetown, KY		TBTOE1977@gmail.com
Brian Patton	240 Boo Jeff Rd SHELBYVILLE, Ky 40061		DEXIBRBPATTON@gmail.com
Zack Hill	449 Apple St, Hazard, KY 41229	606-216-7408	zack@oppalachianky.org
Kathy K All		604 214 3977	Kathy@oppalachianky.org
Phil MARSH		304 951-0822	pmcmarsh@mlc.net
Baylen Campbell	690 Rambles Rd	606 807-6456	baylen@mustappalachia.org



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Power when you need it

Starfire Development

POC: Joseph Albrecht
[Joseph.Albrecht@brightnight
power.com](mailto:Joseph.Albrecht@brightnightpower.com)



Starfire Solar Project Overview

✓ LOCATION

Approximately 2,000 acres of private former mine land in Knott, Perry, & Breathitt Counties

✓ CAPACITY

210 MW_{AC} solar fully contracted– enough to power the equivalent of 50,000 homes

✓ GRID CONNECTION

Point of Interconnection (POI) through PJM: AEP KY Power's Harbert 138kV Substation

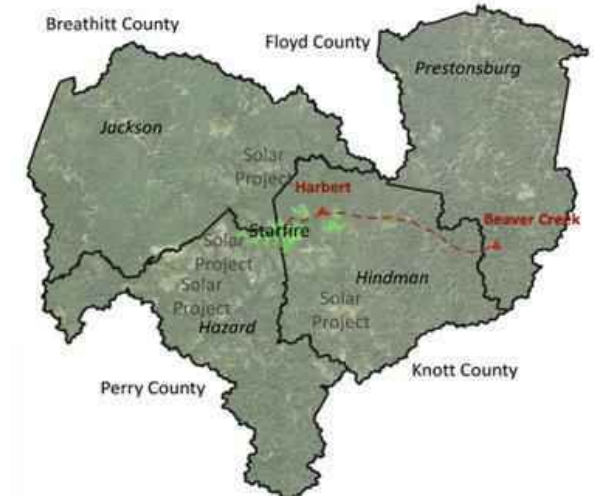
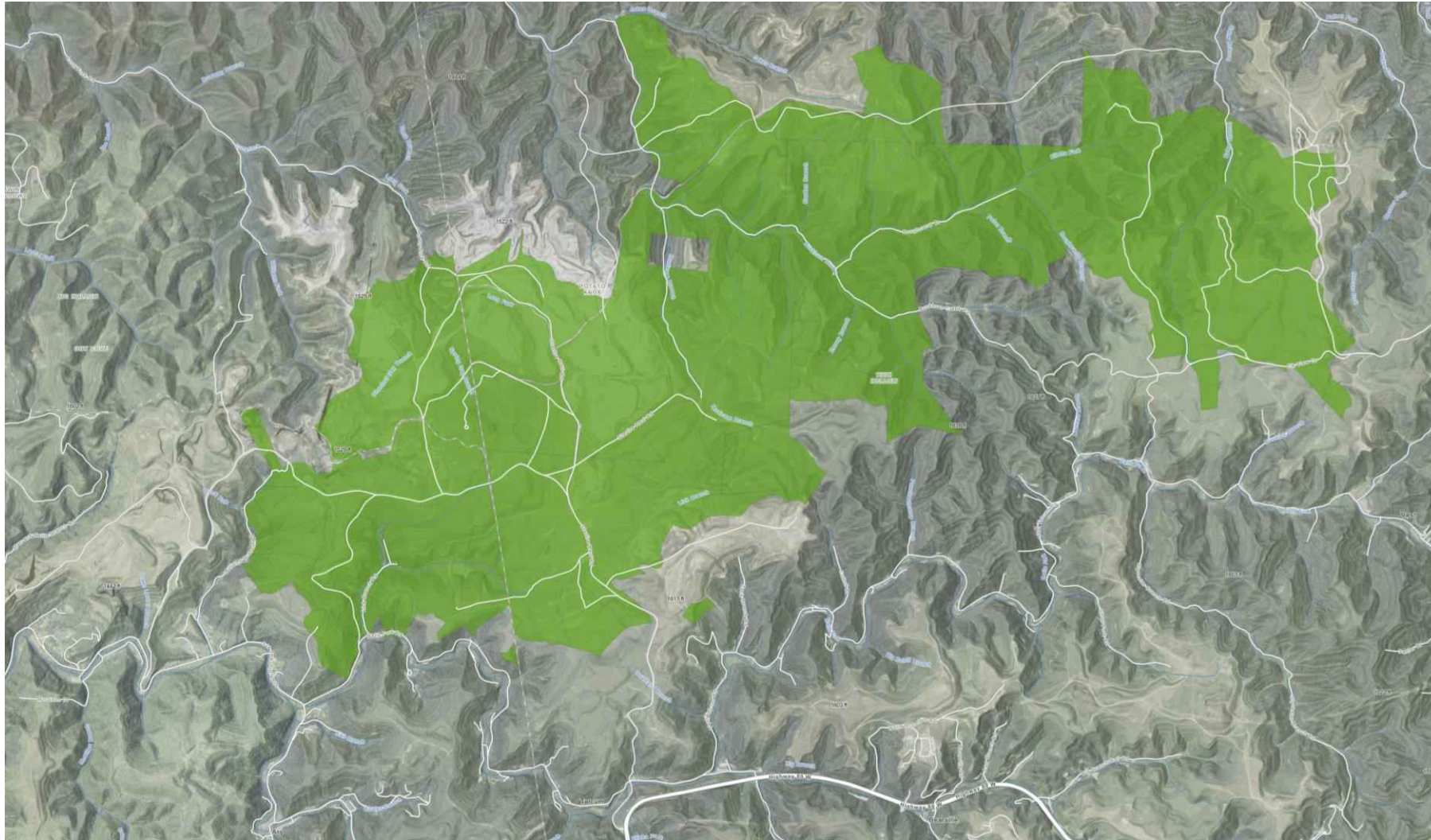
✓ CONSTRUCTION START

Estimated Q2 2026

✓ COMMERCIAL OPERATION DATE

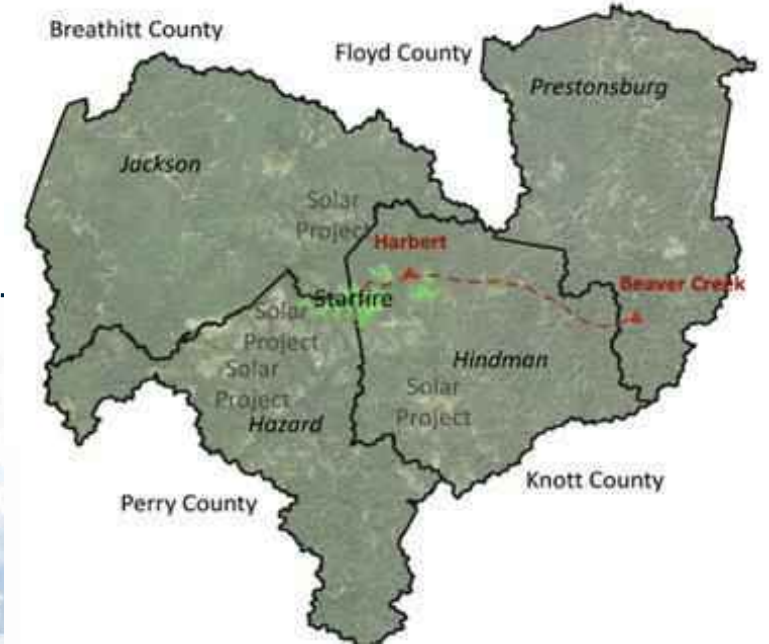
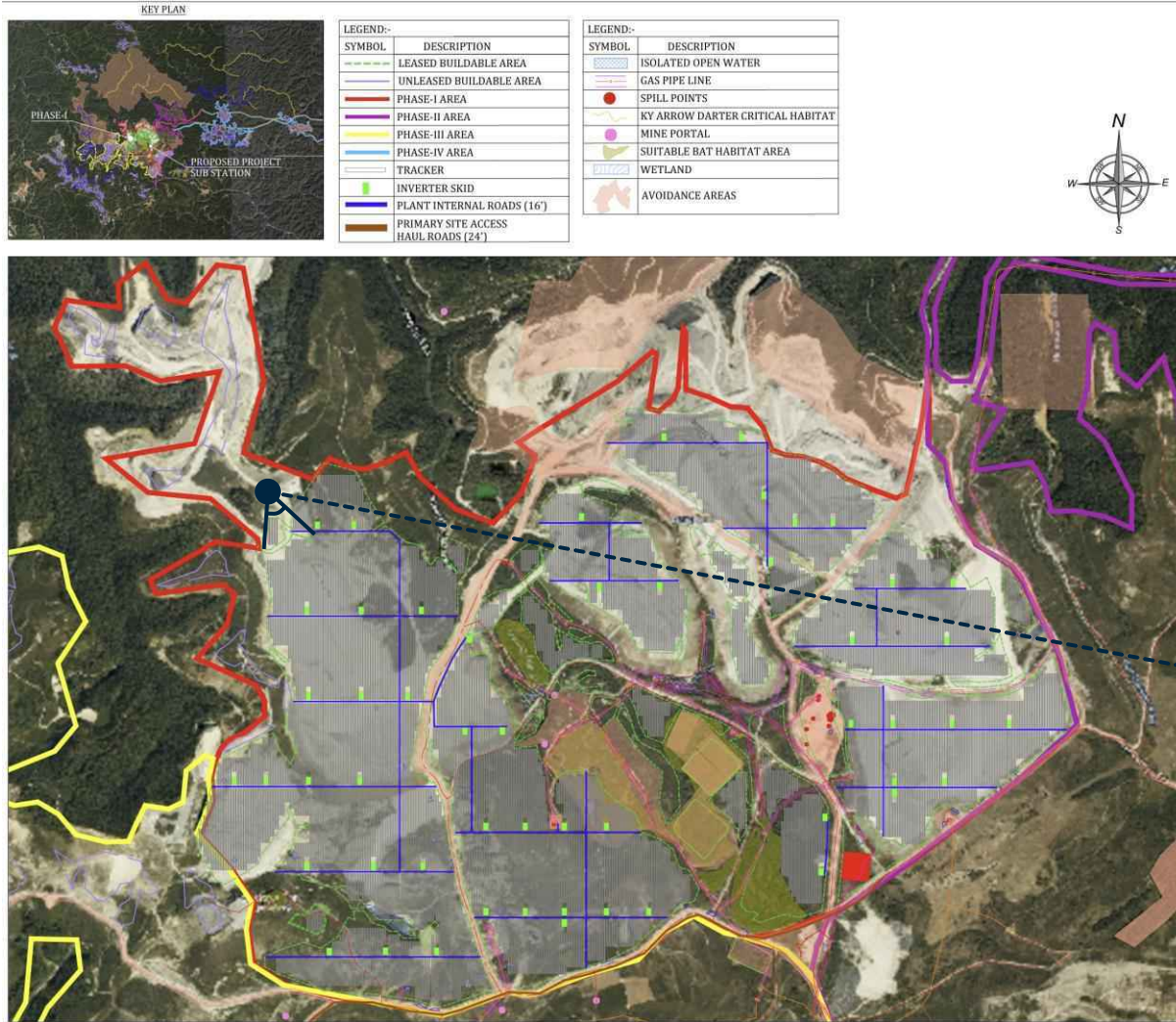
(when the project starts producing energy)
Estimated Q3 2027

~2,000 of 7,000 Acres of Participating Property across 3 landowners will be utilized for a 210MWac project



 Participating Landowner

Preliminary Layout for 210 MWac





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Power when you need it

Starfire Community Benefits

POC: Maribeth Sawchuck
maribeth@brightnightpower.com





Community Benefits

The largest private capital investment in the region's history



Conservation

The Nature Conservancy
University of Kentucky

- Earmark areas around the project site for reforestation with support from TNC for White Oak and American Chestnut
- Design and facilitate habitat connectivity with best practice support from TNC
- Coordinate with UK for ongoing reforestation and reclamation processes
- Study flood risk mitigation



Workforce Development

Education and Local Hiring

- Commitment to hiring locally for all project phases
- Launch Solar Electrician program at the Hazard Community and Technical College
- Coordinate with KY Chamber Center for Diversity, Equity, and Inclusion for project hiring
- Coordination with the KY Career Center Workforce Development System



Community-Directed Philanthropy

The Foundation for Appalachia KY
Grow Appalachia

- Operate the bnCommunity Fund hosted by FAKY using revenue from the Starfire Project and directed by the project communities to support conservation and workforce programming
- Fund the development of a community agricultural space and educational program to support healthy living practices

What can Solar do in Appalachia to supplement variable coal severance taxes?

The proposed Starfire Solar project would make a significant economic contribution to the Commonwealth of Kentucky during construction of the project:

- The proposed Starfire Solar project would provide an estimated one-time pulse of economic activity to the Commonwealth of Kentucky (including the project region) during construction of Phase 1 supporting approximately:
 - 250 direct, indirect, and induced job years.
 - \$16.5 million in associated wages and benefits.
 - \$55.7 million in economic output.
 - \$2.2 million in state and local tax revenue.

The proposed Starfire Solar project would also help ensure reclamation efforts of the mine land are completed, resulting in the release of associated reclamation bonds that can be reinvested into the mining company's operations in the Commonwealth of Kentucky.

- Reinvestment of the estimated bond money into the mining operations in Kentucky would support approximately:
 - 28 direct, indirect, and induced jobs.
 - \$2.0 million in associated wages and benefits.
 - \$8.3 million in economic output.

Table 1: Estimated One-Time Economic and Fiscal Impact on the Project Region from Construction of Phase 1 of the Starfire Solar Project (2023 Dollars)²⁷

Phase 1	Employment (Job Years)	Wages and Benefits	Output
1 st Round Direct Economic Activity	61	\$4,917,400	\$23,953,300
2 nd Round Indirect and Induced Economic Activity	84	\$3,309,300	\$11,529,800
Total Economic Activity	145	\$8,226,700	\$35,483,100
Fiscal Impact			
State and Local Tax Revenue			\$1,268,200

**Totals may not sum due to rounding.*



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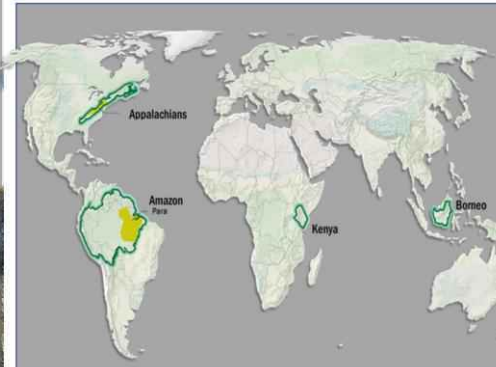
Starfire
Environmental & Permitting

POC: Bob Roy
bob@brightnightpower.com

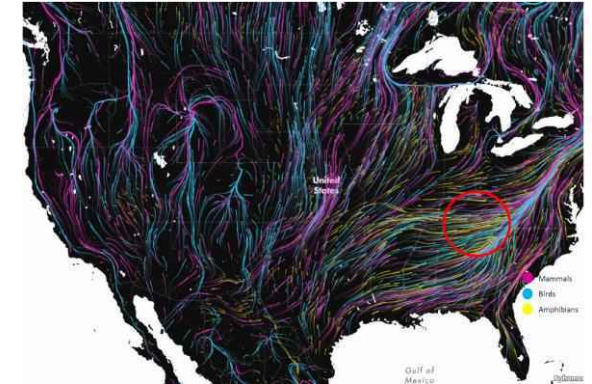


Climate, Conservation, and Communities (3C) for Starfire

- Planning to create at least 100 acres of new tree conservation area
 - Will likely plant short leaf pine or white oak trees
- Planning a clearly delineable north/south wildlife corridor to ensure larger game, elk, can traverse the mountain
- Partnering with TNC & UK on grass seed mix considerations
- Partnering with TNC on wildlife friendly fencing best practices
- BrightNight, The Nature Conservancy, Rivian, and the Foundation for Appalachian Kentucky will demonstrate best practices for climate, conservation, and communities (3C) on mine land to solar projects



Migrations in Motion: The Central Appalachians are the most important Climate Migration Corridor in North America



Power with Purpose: Collaboration between Rivian and TNC

Innovative partnership enables participation of smaller non-profit buyer, elevates community, conservation and climate benefits, and strengthens commitment to the region



Anchor PPA offtaker
Optimize impact + economics



Partial REC Offtaker
3C screening and implementation



Starfire Mountain

Project developer
Focus on mining to renewables

Starfire permitting process with the KY PSC Siting Board overview

BrightNight is working with a team of consultants to complete studies and prepare an application for a Construction Certificate (KRS 278.700-718).



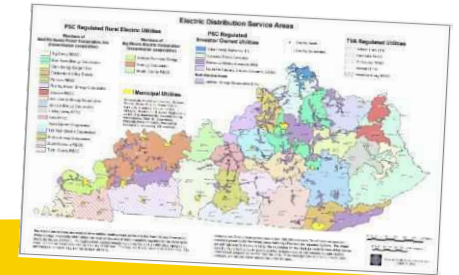
Kentucky Public Service Commission

The Kentucky Siting Board (KSB), which will include two appointed local representatives, will use their own consultants in review of the application. The KSB process is designed to include public participation throughout.

An evidentiary hearing will be held prior to the KSB decision, which includes sworn expert testimony.

The KSB review focuses on three areas:

1. Impact to surrounding community;
2. Economic impacts; and
3. Impact onto the electric transmission grid.



DNR Mine Permit Change & Environmental Studies

Solar facilities are subject to extensive diligence and oversight from federal, state, and local agencies, requiring many studies and plans to create the best project possible for host communities.

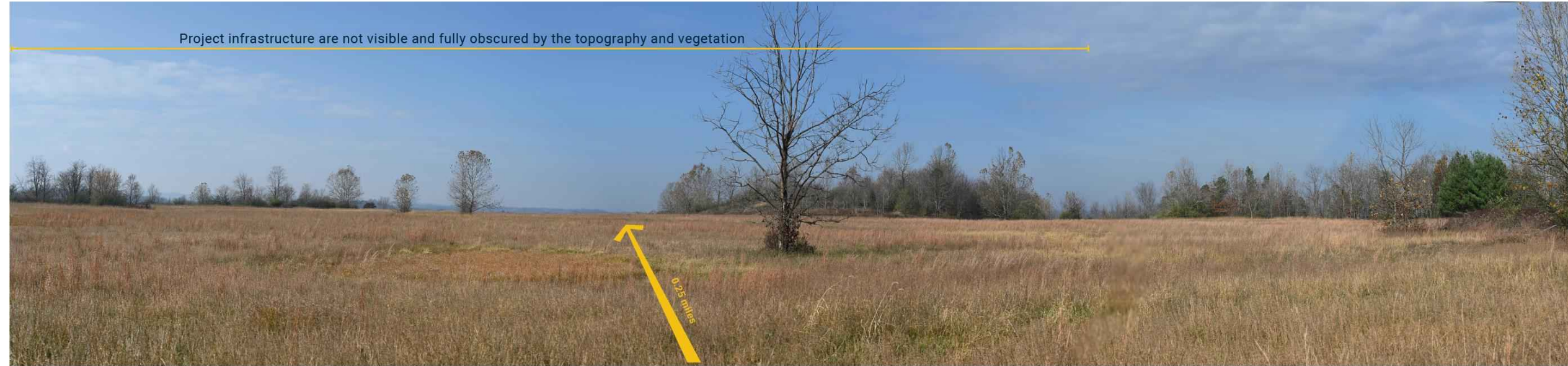
KY DNR Permit Status

- Post Mine Land Use Change to Commercial/Industrial Planned prior to construction commencement
 - Every permit with surface disturbance must have an approved post mining land use (PMLU). These PMLU's vary from Fish and Wildlife, Forestland, Pastureland etc. and the establishment of the approved PMLU is what the Phase Release requirements under 405 KAR 10:040 Section 2 (4) (a-c) are determined on.
 - If a permit has yet received a complete release pursuant to 405 KAR 10:040 Section 2 (4) (c) and the approved post mining land use needs to be revised, the Permittee must submit a Major Revision to the Division of Mine Permits to address the post mining land use change.
 - Implementation of a solar energy PMLU would generally fall under the Industrial Commercial PMLU. Be advised Major Revisions require advertisement in the newspaper of largest circulation of the county or counties in which the permit is located in.
 - These advertisements must run for a minimum of four (4) consecutive weeks, with a thirty (30) day comment period after the final advertisement.
 - The application must also include surface ownership approval for the PMLU change.

Diligence included in project planning:

- Wetland and waterbody delineation
- Protected species habitat assessment
- Phase I environmental site assessment
- Cultural resources review
- Traffic impact study
- Socioeconomic assessment
- Erosion and sediment control plan
- Property value assessment
- Noise evaluation
- Visual assessment
- Landscaping plans
- Glare study
- Federal Aviation Administration review
- Decommissioning plan

Project infrastructure are not visible and fully obscured by the topography and vegetation



KOP 15 PHOTOGRAPH INFORMATION

Location
View from the former mining access road within project of proposed development

Date and Time
Nov 8, 2023, 8:33AM

Geolocation
Latitude: 37.38243209°
Longitude: -83.10818292°

Distance from viewpoint to the closest infrastructure
0.25 miles to closest solar arrays





KOP 2
PHOTOGRAPH INFORMATION

Location
From KY-476 looking Northeast toward the project area

Date and Time
Nov 8, 2023, 6:36AM

Geolocation
Latitude: 37.38461196°
Longitude: -83.15897345°

Distance from viewpoint to the closest infrastructure
0.85 miles to closest solar arrays





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Starfire
Engineering, Construction, &
Operations

POC: Vincent Barletto
vincent@brightnightpower.com



Starfire Technology & Engineering Design Discussion

- BrightNight will address the following key design considerations
 - **Foundation geotechnical risks** – drilling to place foundation piles will be expected across the site from preliminary testing
 - **Terrain following racking** –to reduce grading needs
 - **Pre-construction settlement study** – to ensure differential settlement is not an operational risk
 - **Modeling final mining reclamation** – to evaluate optimal PV layout
 - **Irradiance Resource quality** – continue to evaluate on-site data against soiling from on-going mining operations and valley fog
 - **Hydrology** – evaluate retention area needs and infiltration rates for 100-yr storm events on-site

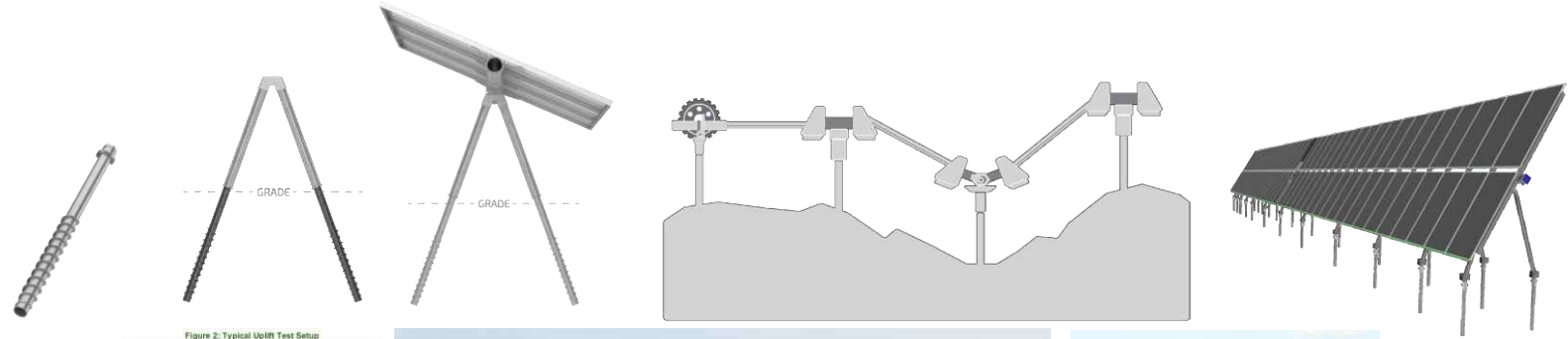


Figure 2: Typical Uplift Test Setup



Construction Equipment

Grading & Site Prep



Foundation & Racking Installation



Panel Installation



Electrical Install



Final Testing & Landscaping



Photos selected from similar projects

Phases of Construction

(Total expected duration: 12 – 15 months)

Phase 1: Site Prep 7-9 months

Key developments

- Site grading (reduced to the minimum needed)
- Install project access roads and internal circulation
- Tree clearing, grubbing as needed
- Soil erosion mitigation
- Equipment delivery
- Perimeter fencing

What to expect

- Temporary traffic
- Use of machinery limited to daytime hours

Phase 2: Electrical Installation 5-6 months

Key developments

- Lay cabling in trenching
- Connect cabling

What to expect

- Electric crews onsite for installation
- De-mobilization of large construction equipment

Phase 3: Racking Installation 6-8 months

Key developments

- Equipment delivery
- Rows of posts placed in the ground over the project area
- Install mechanism to move solar panels
- Begin installing electrical equipment

What to expect

- Equipment delivery vehicles
- Some machine noise while posts are installed

Phase 4: Panel Install 5-6 months

Key developments

- Panels are installed on racking by construction crew

What to expect

- Panel delivery trucks
- Project will begin to take shape
- Majority of construction noise complete from this phase forward

Phase 5: Testing & Landscaping 4-5 months

Key developments

- Inspections of installed equipment
- Power testing
- Site safety testing and training

What to expect

- Inspection crews
- Plant begins operating

Operations and Maintenance Approach

- Our people and communities drive BrightNight's O&M business.
- BrightNight has a strong value orientation towards Environmental, Health and Safety management. The safety of our employees, land and community is our top priority.
- The success of our business relies on working with community. The majority of the Starfire project team will come from the local community.



Starfire Solar Project

Public Information Meeting Knott County

Starfire Solar Project

Public Information Meeting Perry County

Starfire Solar Project

Public Information Meeting Breathitt County

REPRESENTATIVE VIEWS FROM CLOSEST RESIDENTIAL AREAS



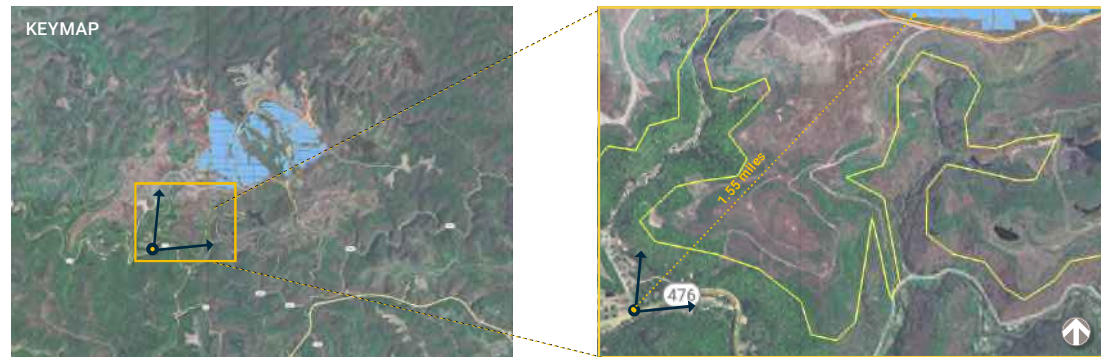
PHOTOGRAPH INFORMATION

Location
From KY-476 looking Northeast toward the project area

Date and Time
Nov 8, 2023, 6:36AM

Geolocation
Latitude: 37.38461196°
Longitude: -83.15897345°

Distance from viewpoint to the closest infrastructure
0.85 miles to closest solar arrays



Under current engineering, the site is not anticipated to be visible.

REPRESENTATIVE VIEWS FROM CLOSEST RESIDENTIAL AREAS



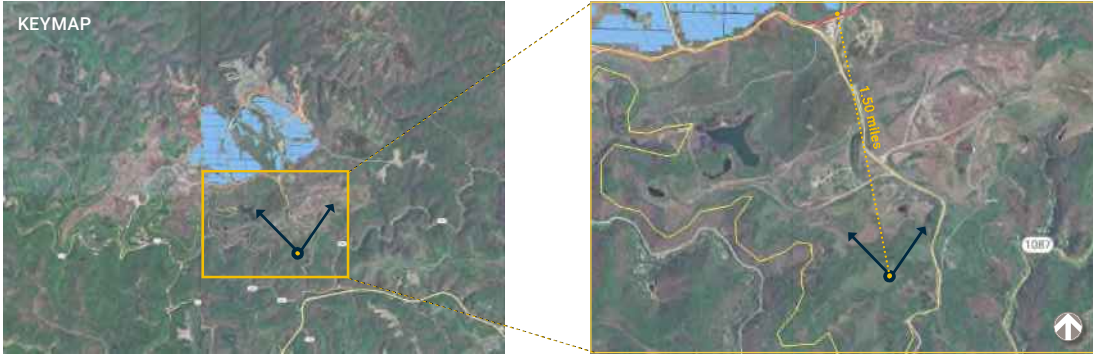
PHOTOGRAPH INFORMATION

Location
View from the former mining access road within project of proposed development

Date and Time
Nov 8, 2023, 8:33AM

Geolocation
Latitude: 37.38243209°
Longitude: -83.10818292°

Distance from viewpoint to the closest infrastructure
0.25 miles to closest solar arrays

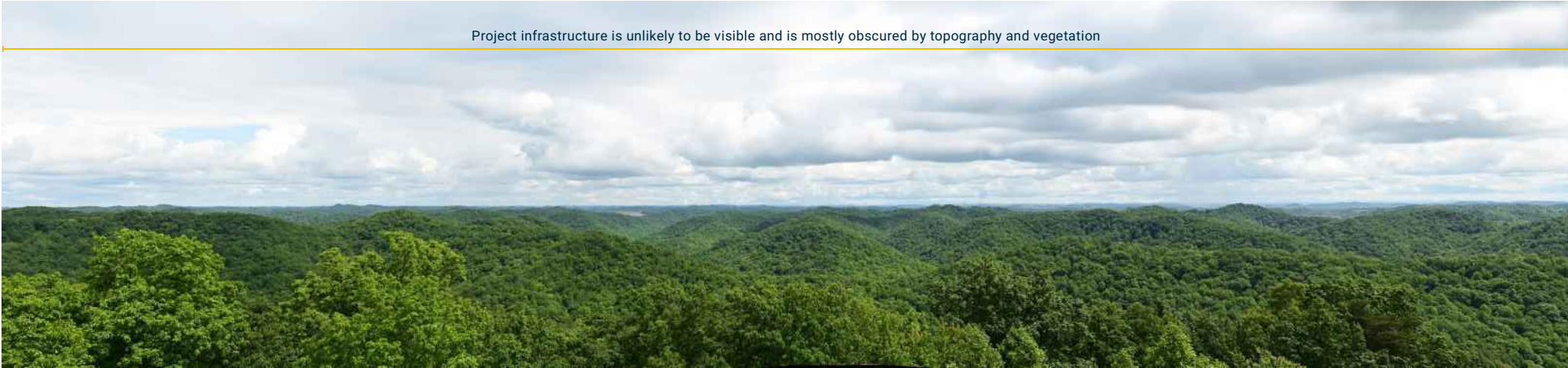


Under current engineering, the site is not anticipated to be visible.

REPRESENTATIVE VIEWS FROM FIRE TOWER : PUBLIC PLATFORM

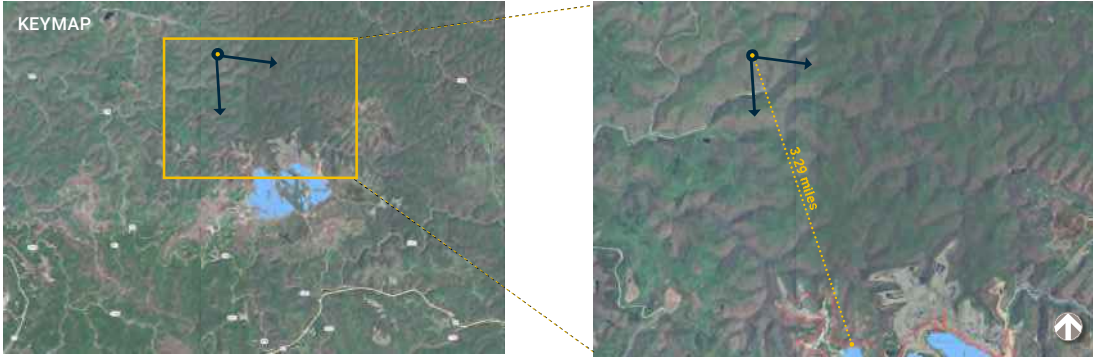


Project infrastructure is unlikely to be visible and is mostly obscured by topography and vegetation



PHOTOGRAPH INFORMATION

- Location**
View from the fire tower in Robinson Forest, North of the project (5,180 feet above mean sea level)
- Date and Time**
May 6, 2024, 6:17PM
- Geolocation**
Latitude: 37.467028°
Longitude: -83.157667°
- Distance from viewpoint to the closest infrastructure**
3.29 miles to closest solar arrays



Under current engineering, the site is not anticipated to be visible.

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 54:

Provide the type of pile driving equipment that will be utilized during the construction phase of the project.

Response:

Although pile driving equipment has not yet been selected, project representatives are in discussions and design process with multiple racking equipment providers. Currently, the Project is considering use of pile driven and/or ground screw installation systems.

Responding Witness: Colin Cannon

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 55:

Provide the method of pile driving that will be utilized during the construction phase of the project.

Response:

See Response No. 54 above.

Responding Witness: Colin Cannon

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 56:

Provide a detailed table outlining the anticipated noise levels during the construction phase of the project for each residential structure within 2,000 feet. Include noise levels for pile driving and the number of feet from each structure.

Response:

There are no identified residential structures within 2,000 feet. However, Table A-1 within the Acoustic Assessment Report (SAR Attachment 4) provides the anticipated noise levels during construction for residential structures beyond 2,000 feet. Table A-1 includes the distance between the Project boundary to each residential structure. Noise emission results are inclusive of pile-driving activities during the equipment installation phase.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
 Responses to Siting Board Staff's First Request for Information
 Case No. 2024-00255

Request No. 57:

Provide a detailed table outlining the anticipated noise levels during the construction phase of the project for each non-residential structure within 2,000 feet. Include noise levels for pile driving and the number of feet from each structure.

Response:

Construction Noise Levels at Non-residential Structures within 2,000 Feet

Receptor	UTM Coordinates (meters), 17N		Distance to Project Boundary (feet)	Site Preparation and Grading		Trenching and Road Construction		Equipment Installation (Includes Pile Driving)		Commissioning	
	Easting	Northing		Peak (dBA, L _{max})	Average (dBA L _{eq})	Peak (dBA, L _{max})	Average (dBA L _{eq})	Peak (dBA, L _{max})	Average (dBA L _{eq})	Peak (dBA, L _{max})	Average (dBA L _{eq})
NONRESIDENTIAL00001	312841	4141640	183	80	76	81	78	88	81	47	43
NONRESIDENTIAL00002	312867	4141611	298	75	72	77	74	84	77	43	39
NONRESIDENTIAL00003	312849	4141577	391	73	69	75	71	81	75	40	36
NONRESIDENTIAL00004	313504	4142740	Within Project boundary	91	87	93	89	99	93	58	54
NONRESIDENTIAL00005	312973	4142685	Within Project boundary	91	87	93	89	99	93	58	54
NONRESIDENTIAL00006	312259	4142812	Within Project boundary	91	87	93	89	99	93	58	54
NONRESIDENTIAL00007	312426	4142466	Within Project boundary	91	87	93	89	99	93	58	54

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 58:

Provide a detailed table outlining the anticipated noise levels during the operational phase of the project for each residential structure within 2,000 feet. Include noise levels for inverters, panels, and substations, and the number of feet from each structure.

Response:

There are no identified residential structures within 2,000 feet. Table A-2 within the Acoustic Assessment Report (SAR Attachment 4) provides the anticipated noise levels during the operational phase for residential structures beyond 2,000 feet and includes the distance from each residential structure to the nearest Project infrastructure.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 59:

Provide a detailed table outlining the anticipated noise levels during the operational phase of the project for each non-residential structure within 2,000 feet. Include noise levels for inverters, transformers, and substations, and the number of feet from each structure.

Response:

Please see response to 16(a) in conjunction with the below table.

Operational Noise Levels at Non-residential Structures within 2,000 Feet

Receptor	UTM Coordinates (meters), 17N		Distance to Nearest Project Infrastructure (feet)	Received L_{dn} (dBA)	Received L_{eq}/L_{max} (dBA)
	Easting	Northing			
NONRESIDENTIAL00001	312841	4141640	389	47	41
NONRESIDENTIAL00002	312867	4141611	481	47	40
NONRESIDENTIAL00003	312849	4141577	596	46	40
NONRESIDENTIAL00004	313504	4142740	104	56	50
NONRESIDENTIAL00005	312973	4142685	242	53	46
NONRESIDENTIAL00006	312259	4142812	244	51	45
NONRESIDENTIAL00007	312426	4142466	242	50	43

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 60:

Provide a list of noise mitigation measures considered during the construction phase of the project.

Response:

Please refer to Acoustic Assessment Report (SAR Attachment 4). Section 4.3, titled Construction Noise Mitigation, includes a list of noise mitigation measures considered during the construction phase of the Project.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 61:

Provide a detailed table outlining the anticipated noise levels of all construction equipment to be used during the construction phase of the project.

Response:

Table 2 of the Acoustic Assessment Report (SAR Attachment 4) provides the anticipated noise levels of all construction equipment to be used during the construction phase of the Project.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 62:

Refer to Application Exhibit A, "Neighborhood Map." Supplement this exhibit with the following information with adequate resolution for review:

- a. Site access road(s) from nearest public roadways and locations of guard house(s) referenced in the Site Assessment Report (SAR).
- b. Location of proposed project substation.
- c. Location of proposed transmission line to point of interconnection.
















Response:

- a. See attached.
- b. See Response 62(a).
- c. See Response 62(a) (as anticipated for the proposed/preliminary route and to be approved in separate application to the Siting Board).

Responding Witness: Annie Winter

**Starfire Solar Facility
Knott, Perry, and Breathitt Counties,
Kentucky**

Neighborhood Map

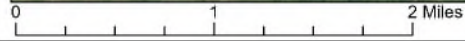
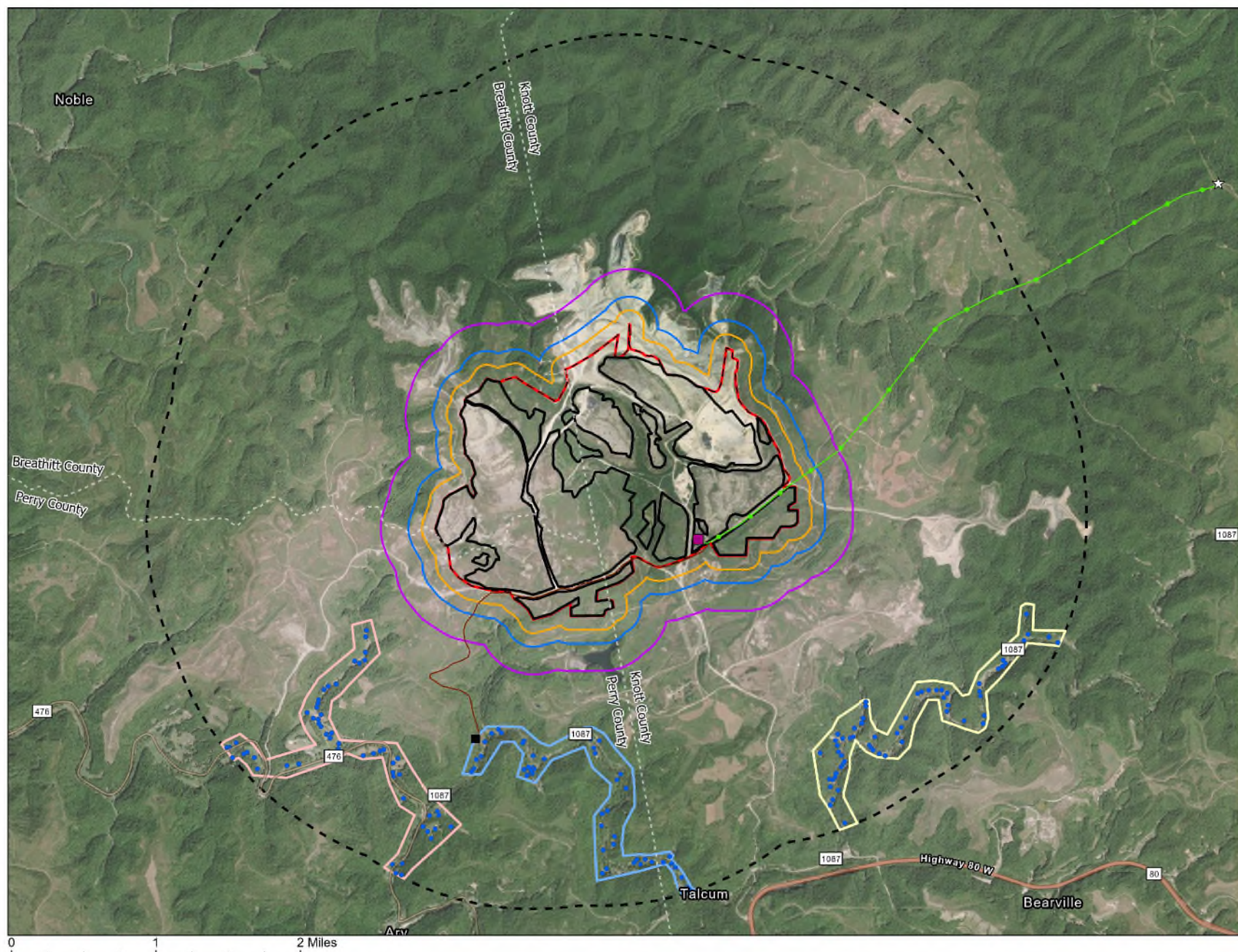
- LEGEND**
-  Proposed Project Boundary
 -  Proposed Limits of Disturbance (LOD)
 -  Proposed Point of Interconnect
 -  Proposed Guard House
 -  Proposed Project Substation
 -  Proposed Transmission Line
 -  Proposed Access Road
 -  Residences within 2 Miles
 -  Neighborhood 1
 -  Neighborhood 2
 -  Neighborhood 3
 -  500-ft Buffer
 -  1,000-ft Buffer
 -  2,000-ft Buffer
 -  2-Mile Buffer

Data Sources:
ESRI Aerial Imagery 2023; Tetra Tech Desktop Delineated Residences 2025

Prepared for: STMOBn, LLC
Prepared by: Tetra Tech GIS Team (NAB)
Updated: 3/25/2025



Spatial Reference
NAD 1983 StatePlane Kentucky South FIPS 1602 Feet



Path: K:\GIS\Starfire\Starfire\MapDocs\YSB_UrbanRequest_Response\YSB_UrbanRequest_Response.aprx

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 63:

Identify the distance of the proposed transmission line from the project boundary to the point of interconnection.

Response:

It is anticipated that the length of the proposed transmission line, for which approval will be sought by separate application with the Siting Board, as measured from the Project boundary to the point of interconnect (POI) will be approximately four (4) miles.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 64:

Provide an estimated breakdown of the 1,980 acre project site and the 1,385 acre footprint within the project fence line by county.

Response:

The Project is apportioned by county as follows:

- Project Boundary:
 - Breathitt County: 565 acres;
 - Knott County: 1,115 acres; and
 - Perry County: 300 acres.

- Fenced Area:
 - Breathitt County: 429 acres;
 - Knott County: 710 acres; and
 - Perry County: 245 acres.

Responding Witness: Annie Winter

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 65:

Refer to SAR, page 2, paragraph 4. The SAR states that there will be a guard house at the base of the main access road leading up to the site. Provide additional information regarding the hours and days of the week that the guard house is expected to be manned. Include a breakdown for the construction and operational phase of the project.

Response:

Hours of operations for the guard house during Project construction will be determined through negotiations with the EPC during the RFP process. Active guard duty is not anticipated during the Project's operations phase.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 66:

Refer to SAR, page 2, paragraph 4. The SAR states that there will be separate access gates to each of the array areas. Explain whether each of the array areas will be individually fenced. If so, describe the hours during which those gates will be locked during the construction and operational phase of the project.

Response:

Individual panel array areas will be individually fenced and have a minimum of one access gate per array area. During construction, all gates will be locked overnight and during days when no construction activity is occurring. During operation, all gates will be locked 24 hours per day and only opened when operations and maintenance personnel are entering or leaving an array area.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 67:

Refer to SAR, Attachment H, "Traffic Study." Provide a timeline for the construction phase of the project.

Response:

Construction is anticipated to commence in the summer of 2026 and continue through late 2027 with a targeted start of operations prior to December 31, 2027. Construction would begin with site prep and earthwork, including tree removal. Thereafter, installation of piling and trenching would occur, followed by installation of electric cables and solar panels and construction of the Project collector substation.

Responding Witness: David Gil

STMO Bn, LLC (Starfire)
Responses to Siting Board Staff's First Request for Information
Case No. 2024-00255

Request No. 68:

Refer to SAR, Attachment H, "Traffic Study." Provide a narrative summary of any contact that Starfire has had with the following parties regarding the proposed project, traffic impacts, heavy deliveries to the site, or mitigation measures:

- a. Kentucky Transportation Cabinet District Engineer;
- b. Knott County Road Department;
- c. Breathitt County Road Department;
- d. Perry County Road Departments.

Response:

- a. Formal transportation agency coordination has not yet occurred. Project representatives have consulted with transportation engineers from the Kentucky Transportation Cabinet to obtain information on road classifications and to ensure compliance with all legal requirements.
- b. The Project plans to coordinate as necessary with the Kentucky Transportation Cabinet District Engineer, Knott County Road Department, Breathitt County Road Department, and Perry County Road Departments as the design of the Project progresses.
- c. See Response 68(b).
- d. See Response 68(b).

Responding Witness: David Gil