Technical Memorandum

To: AEUG Fleming Solar, LLC
From: Tetra Tech, Inc.
Date: November 3, 2020
Subject: Fleming Solar Project Visual Assessment

Tetra Tech, Inc. ("Tetra Tech") was contracted by AEUG Fleming Solar, LLC ("AFS") to perform a visual assessment for the Fleming Solar Project ("Project") that is proposed to have a nameplate capacity of up to 188 megawatts. The Project is located on approximately 2,420 acres (approximately 3.78 square miles) of private land in Fleming County, Kentucky ("Project Area"). The main Project components evaluated in the visual assessment include solar panels, electric substation, and an operations and maintenance ("O&M") building.

Desktop Review and Field Investigation

The Project Area is located between Elizaville, Flemingsburg Junction, and Flemingsburg. It is roughly bounded by Old Convict Road on the north, Elizaville Road on the south, Highway 11 on the east, and Nepton Road to the west. The topography in the area consists of a series of gently rolling hills and swales. Land use is primarily pasture and agricultural, with no large forested areas. Tree lines typically occur at parcel boundaries, in riparian zones, and along roadways. Scattered rural residential development, commercial and retail businesses, communication facilities, and vehicular transportation network are all present within and surrounding the Project Area.

A review of potential visual resources within 2 miles of the Project Area included, but was not limited to, recreation areas, local community resources (schools, libraries, places of worship), and other scenic resources. After review of these potential sensitive resources, Tetra Tech identified nine representative viewpoints for investigation in the field. These points represent locations around the Project where viewers could notice a change in the existing landscaping setting due to the presence of Project facilities, including a local high school, key travel-ways in the county, areas with clusters of residential properties, a recreation area, a golf course, and a place of worship.

In addition to visiting each of these locations in the field, three visual simulations (VP-01, VP-02, VP-03) and three line-of-sight graphics (VP-06, VP-07, VP-09) were developed for six of the viewpoints for use in the visual assessment. Figure 1 depicts the Project site layout, visual study area, and location of the nine viewpoints visited in the field.

Tetra Tech conducted a field visit on June 16, 2020, and captured digital photographs from each of the nine identified viewpoints. The field visit and technical photographs were used for the subsequent visual assessment.

1560 Broadway Ste. 1400, Denver, Colorado 80202
Tel 303.291.6260 Fax 303.295.2818
www.tetratech.com

Visual Assessment

Each viewpoint was evaluated to determine if the Project Area would be potentially visible and in what context that view would be. Photographs, line-of-sight graphics, and visual simulations were developed and referenced to assist in the analysis. A line of sight is the direct line between the viewer and a distant object. Visual simulations combine photographs with rendered computer models of Project facilities to predict what would be seen if the proposed Project were built in the photographed setting. Both the line-of-sight and visual simulations assist in determining if views may be obstructed by intervening terrain, vegetation, or structures that exist between a viewpoint and the Project.

VP-01: Elizaville Road

- **View Represented:** Residential, traveler
- **Location:** VP-01 is located near Elizaville Road/Highway 32 looking towards the rural residential area to the north. The photograph was taken from the road, looking north towards the Project Area.
- **Viewing Direction to Project:** North
- **Distance to Project Area:** Approximately 1,427 feet (approximately 0.27 miles)
- **Corresponding Figure:** Visual Simulation 1a and Visual Simulation 1b (Attachment A)

The existing landscape setting is characterized by moderately rolling terrain. The area is largely rural with agricultural and pastural fields. Human-made features consist of a grey and brown barn with white trim and a white roof and white and tan/brown houses and barns in the distance, as well as fence lines. Vegetation includes grasses and dense patches of trees and shrubs, typically occurring at parcel lines and along roadways. According to Visual Simulations 1a and 1b, views of the Project will be mostly screened by vegetation and topography between the viewer and the Project's perimeter fence line. The fence and a few higher elevated panels along the hilltops would be visible where tree cover is not present. Some portions of the solar array may be visible between stands of vegetation; however, portions that are visible would not attract attention and would be a subordinate feature in the landscape setting. Therefore, contrast is anticipated to be weak.

VP-02: Old Convict Road

- **View Represented:** Residential, traveler
- **Location:** VP-02 is located on Old Convert Road/Highway 559 and is located between two agricultural properties. The photograph was taken from the road, looking south towards the Project Area.
- **Viewing Direction to Project:** South
- **Distance to Project Area:** Approximately 250 feet (approximately 0.05 miles)
- **Corresponding Figure:** Visual Simulation 2 (Attachment A)

The existing landscape setting is characterized by moderately rolling terrain in the foreground. The area is largely rural with agricultural and pastural fields. Human-made features consist of a wire fence with wood posts immediately in front of the viewpoint. Vegetation includes patches of green grasses and brown agricultural fields, as well as dense patches of trees and shrubs along the perimeter of the area. According to Visual Simulation 2, views of the Project will be visible from this location, but the view will be short-term

for travelers along the road. The Project would introduce gray color, geometric shapes, and horizontal lines into the landscape setting. The Project would attract attention, but the portion of the Project that would be visible would not dominate the landscape because the panels follow the curves of the land, and the brown color of the agricultural patches in most cases, therefore creating moderate contrast.

VP-03: Flemingsburg Baptist Church

- **View Represented:** Place of Worship, traveler
- **Location:** VP-03 is located in the parking lot of the Flemingsburg Baptist Church located on the northeast corner of the Highway 32 and Cassidy Pike intersection. The photograph was taken from the parking lot, looking northwest towards the Project Area.
- **Viewing Direction to Project:** Northwest
- **Distance to Project Area:** Approximately 750 feet (approximately 0.14 miles)
- **Corresponding Figure:** Visual Simulation 3 (Attachment A)

The existing landscape setting is characterized by flat to moderately rolling terrain in the foreground. The area is largely rural with agricultural and pastural fields. Human-made features consist of pavement, wire fencing with wood posts, and transmission lines in middleground. Vegetation includes patches of green grasses, brown agricultural fields, and clumps of dense patches of trees and shrubs throughout and along the perimeter of the area. According to Visual Simulation 3, the Project will be visible from this location, but the view will be short-term for people going to and from the parking lot. The Project would introduce gray color, geometric shapes, and horizontal lines into the landscape setting. The Project would attract attention, but the portion of the Project that would be visible would not dominate the landscape because the panels follow the curves of the land and the brown color of the agricultural patches in some cases, as well as the dark green of the vegetation, therefore creating moderate contrast.

VP-04: Flemingsburg Junction

- **View Represented:** Traveler, residential
- **Location:** VP-04 lies on Route 170 in the valley of Johnson Creek between hills that rise to the northwest and southeast. The tree-lined riparian buffer along Johnson Creek is to the right. The photograph was taken from the road, looking south towards the Project Area.
- **Viewing Direction to Project:** South
- **Distance to Project Area:** Approximately 5,356 feet (approximately 1 mile)
- **Corresponding Figure** See Photo Log (Attachment C)

The existing landscape setting is characterized by slightly sloping terrain. The area is largely rural with agricultural and pastural fields. Human-made features consist of a paved road, transmission lines following the road, and colored signs. Vegetation includes grasses and dense patches of trees and shrubs. According to Photograph 4, views of the Project are likely to be entirely screened by a dense line of vegetation across the road. Some portions of the solar array may be visible between stands of vegetation; however, portions that are visible would not attract attention and would be a subordinate feature in the landscape setting. Therefore, contrast is anticipated to be weak.

VP-05: Fleming County High School

- **View Represented:** Public school, traveler
- **Location:** VP-05 is located in the Fleming County High School parking lot on Highway 32 and between the major roads of Cassidy Pike to the west and County Lane to the east.
- **Viewing Direction:** North
- **Distance to Project Area:** Approximately 1,224 feet (approximately 0.23 miles)
- **Corresponding Figure:** See Photo Log (Attachment C)

The existing landscape setting is characterized by moderately rolling terrain. The area is largely rural with agricultural and pastural fields as well as an area for sports. Human-made features consist of a small white and black building and dugout for baseball, roads, fence lines, and transmission lines in the vicinity. Vegetation includes grasses and dense patches of trees and shrubs that appear to be in lines as they follow the existing roads. According to Photograph 5, views of the Project will be mostly screened by vegetation and topography between the viewer and the Project's perimeter fence line. The fence and a few higher elevated panels along the hilltops may be visible where tree cover is not present. Some portions of the solar array may be visible between stands of vegetation; however, if any portion is visible, it would not attract attention and would be a subordinate feature in the landscape setting. Therefore, contrast is anticipated to be weak.

VP-06: Nepton

- **View Represented:** Residential, traveler
- **Location:** VP-06 is located west of the Project Area at the northwest corner of Hudson Lane and Nepton Road/Highway 367 intersection. The photograph for this viewpoint was taken on Nepton Road, looking northeast to the Project Area.
- **Viewing Direction to Project:** East
- **Distance to Project Area:** Approximately 2,272 feet (approximately 0.43 miles)
- **Corresponding Figure:** Line of Sight 1 (Attachment B)

The existing landscape setting is characterized by slightly sloping terrain. Human-made features consist of a paved road, a transmission line following the road, colored street signs, and a few white, tan/brown, and red houses. According to Line of Sight 1, views of the Project are likely to be entirely screened from this viewpoint due to rolling topography and intervening tree lines. Therefore, the contrast is anticipated to be weak.

VP-07: Fleming County Golf Association

- **View Represented:** Commercial, recreation
- **Location:** VP-07 is located east of the Project Area near the Fleming County Golf Association course. The photograph was taken from Maysville Road, to the northeast of the Kentucky 57 Bypass and Maysville Road intersection.
- **Viewing Direction:** West

- **Distance to Project Area:** Approximately 7,371 feet (approximately 1.4 miles)
- **Corresponding Figure:** See Photo Log (Attachment C)

The existing landscape is characterized by moderately sloping terrain. The surrounding area is largely rural with agricultural and pastural fields and a commercial golf course located directly to the west of the viewpoint. Vegetation includes grasses and shrubs, with a dense patch of trees surrounding a small riparian area to the southwest. According to Line of Sight 2, the Project is likely to be entirely screened from this viewpoint due to a large hill located 0.25 miles away from VP-07. Therefore, the contrast of the Project is anticipated to be weak.

VP-08: Fleming County Recreational Park

- **View Represented:** Public park (recreation), traveler
- **Location:** VP-08 is located on the northeast side of the Project Area at Fleming County Recreation Park at the Taylor Mill Road and Recreation Park A Road intersection. The photograph was taken at the park looking southwest towards to the Project.
- **Viewing Direction:** Southwest
- **Distance to Project Area:** Approximately 9,885 feet (approximately 1.87 miles)
- **Corresponding Figure:** See Photo Log (Attachment C)

The existing landscape setting is characterized by moderately rolling terrain. The surrounding land use is largely rural with agricultural and pastoral landscapes to the north, east, and west, and commercial properties to the south. Human-made features consist of paved roads, a transmission line following the road, colorful street signs, fences along the street and parcel lines, and gray houses with white/tan roofs. Trees and shrubs are located along roads and parcel lines. The Project will likely be visible between stands of vegetation due to the lack of screening to the southwest of the viewpoint. The Project would introduce gray color, geometric shapes, and horizontal lines into the landscape setting, which would not attract attention in this area as it would be a subordinate feature in this landscape setting at nearly 2 miles away. Therefore, the Project would introduce weak contrast.

VP-09: East of Elizaville

- **View Represented:** Residential, traveler
- **Location:** VP-09 is located south of the Project Area on Highway 32. The photograph was taken on the road looking northeast towards the Project, which is approximately 0.44 miles northeast of this viewpoint.
- **Viewing Direction:** Northeast
- **Distance to Nearest Facility (Solar Panel, O&M Building, Substation):** Approximately 2,331 feet (approximately 0.44 miles)
- **Corresponding Figure:** Line of Sight 3 (Attachment B)

The existing landscape setting is characterized by moderately rolling terrain. The area is largely rural with agricultural and pastoral fields. Human-made features consist of a few white and tan/brown houses and

fence lines at properties. Vegetation includes grasses with patches of trees, typically occurring at parcel lines and along roadways. According to Line of Sight 3, views of the Project from this viewpoint will be screened by rolling topography and intervening treelines. Therefore, the contrast of the Project is anticipated to be weak.

Concluding Discussion

The proposed Project would introduce low vertical, geometric elements that are gray in color into a relatively rolling terrain landscape dominated by green vegetation and patches of trees and shrubs. Visual impacts would vary depending on several factors, such as the distance of the viewer from the Project and whether views toward the Project are unobstructed or screened by vegetation, terrain, or development. Viewers in proximity to the Project may have unobstructed or partially screened views and include adjacent rural residences and travelers along the local roads and highways. Existing vegetation between the solar arrays and the residences will be left in place, to the extent practicable, to help screen the Project and reduce visual impacts from the adjacent homes. It is anticipated that views of the Project from surrounding places (Nepton, Elizaville, Flemingsburg Junction, Flemingsburg) would generally be screened by vegetation and structures associated with development. Roadways and rural residential development located outside of built communities would have elevated views towards the Project. Views would vary from completely screened to partially screened to unobstructed. Portions of the Project that would be visible would be seen in the context of existing development and would appear as a co-dominant feature in the landscape setting.