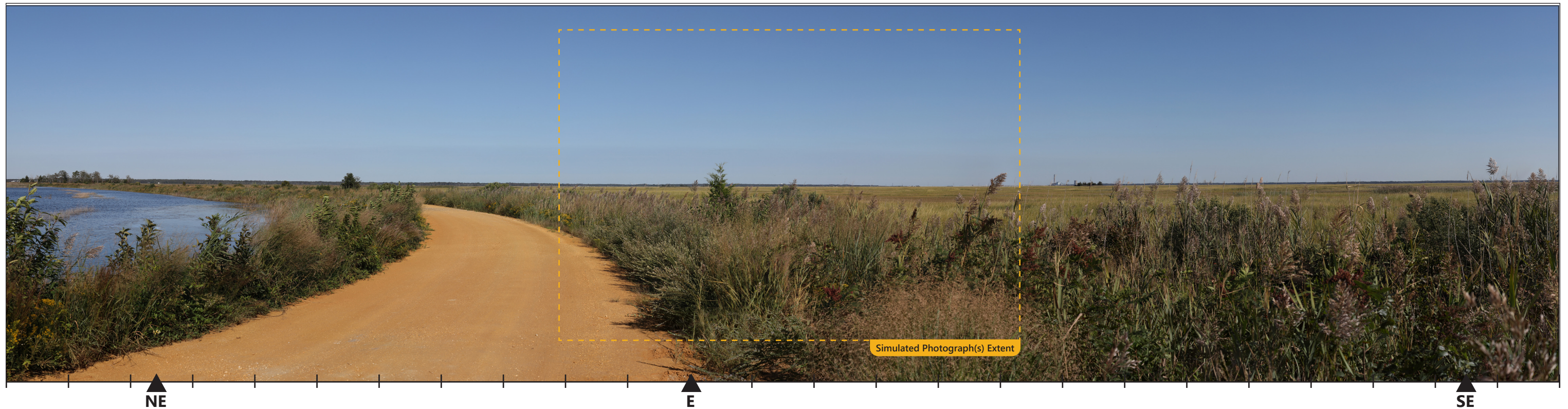
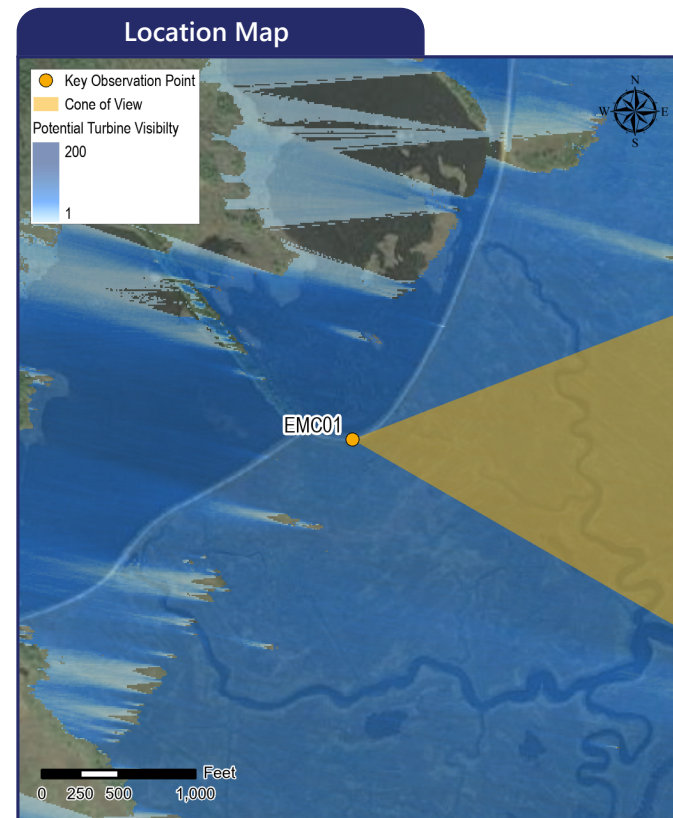
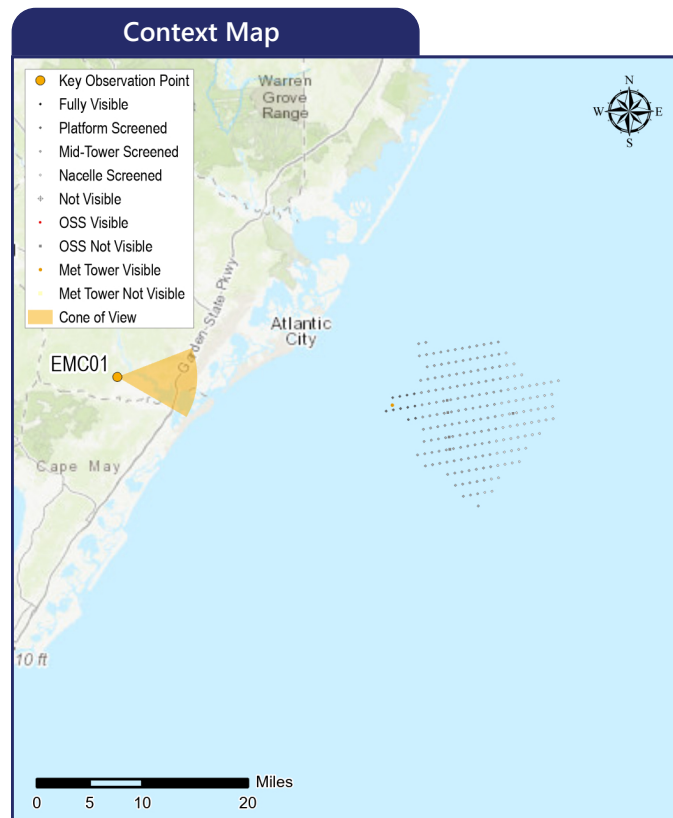


EMC01 Tuckahoe WMA

Estell Manor City, Atlantic County, New Jersey



The image above is a +/- 124° panorama photograph from Tuckahoe WMA, panning clockwise from northeast (left) to southeast (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).



Simulation Information

Coordinates: 39.32615°N, 74.72375°W
 Character Area: Salt Marsh, Landscape (LCA)
 User Group: Residents/Tourists
 Direction of View: East
 Distance to Nearest Visible Turbine: 25.70 miles
 Visually Sensitive Resource: Tuckahoe Wildlife Management Area

Environmental Information

Date Taken: 09/22/2020
 Time: 3:34 PM
 Temperature: 72°F
 Humidity: 31%
 Visibility: 10 miles
 Wind Direction: West-northwest
 Wind Speed: 14 mph
 Conditions Observed: Fair

Photograph Information

Camera: Canon EOS 5D Mark IV
 Resolution: 30.4 Megapixels
 Focal Length: 50mm
 Camera Height: 15.98 feet AMSL

Notes

Printed at 100%, the photosimulations are 15 inches wide by 10 inches high. At this size, the photosimulation(s) should be viewed from a distance of 21 inches.

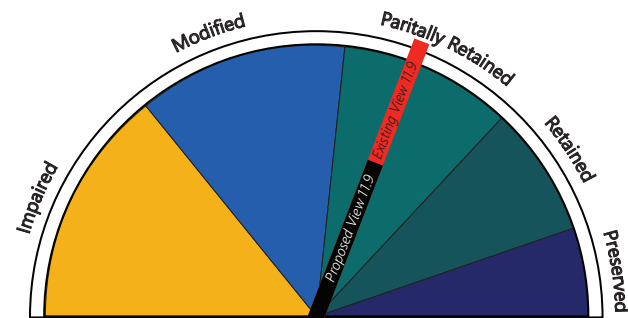
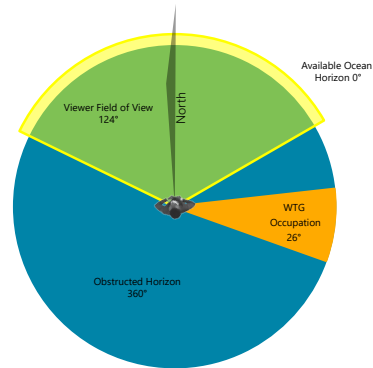
Simulated Photograph(s)



Map considers screening by curvature of the earth, viewer height, and WTG height only. Considering landscape features 86 WTGs will be visible.

Field of View Visual Impact Rating

Impact Rating Summary



0.0. Negligible

Existing Conditions

Scenic Quality: Partially Retained
 Rating Panel Score Average: 11.9
 Rating Panel Score Range: 9.2 - 13.8

This view is from the Tuckahoe WMA in Estell Manor City, Atlantic County, New Jersey. The Tuckahoe WMA consists of over 17,000 acres of salt marsh, title creeks, pine barrens forest, brackish impoundments, and freshwater wetlands managed by the New Jersey Department of Environmental Protection, Division of Fish and Wildlife. The WMA provides habitat for a wide variety of resident and migratory waterfowl, shore birds, raptors, and song birds. This natural area is used primarily for bird watching, hunting, hiking, and kayaking. Developed facilities are limited to dirt roads, parking areas, and a boat launch.

The selected KOP is located on Griscom Road, a dirt road adjacent to ponds connecting to Hawkins Creek. The view to the east from this location is representative of the Salt Marsh character area and features a broad expanse of open salt marsh that extends almost to the horizon. The level topography and lack of trees provides for open, uninterrupted, long-distance views. In the selected photo, the edge of a dirt road in the immediate foreground is bordered by a band of common reed and a few shrubs that separate the road from the adjacent expanse of low salt marsh vegetation. No open water is visible within the marsh, which extends to a low tree line at the horizon. The sky overhead is clear blue, and uninterrupted by trees or other tall features. Along with the band of dark green trees, the distant background also includes occasional man-made structures, including water tanks and towers that extend slightly into the sky. The height and contrasting white color of the water tanks make these structures distant focal points in the view. However, most viewers in this area will be actively looking for birds and other wildlife in foreground portions of the landscape.

This view will be experienced primarily by bird watchers, hunters, and other nature enthusiasts who will likely be focused on wildlife and other elements of interest, relatively close to the roadway on which they are traveling. Visual interest is limited due to the level topography and lack of variability in landscape features. Rating panel scores for the existing conditions photo ranged from 9.2 to 13.8 (average score = 11.9). This score indicates that the view is partially retained.

Proposed Conditions

Scenic Quality: Partially Retained
 Rating Panel Score Average: 11.9
 Rating Panel Score Range: 9.2 - 13.8
 Impact Magnitude: 0.0 (Negligible)

Viewshed analysis suggests that multiple turbines within the proposed Project have the potential to be visible from this KOP and from most of the salt marsh areas within the WMA that are unscreened by intervening trees, hills, or structures. However, as illustrated in the photosimulation, this visibility is primarily limited to WTG blade tips that extend above the forest vegetation at the horizon line. Where background vegetation diminishes in the approach to the bridges connecting the barrier islands to the mainland, some turbine nacelles and portions of the tower are also visible, but their white color in the front-lit conditions represented make them difficult to discern against the light blue sky.

With the proposed Project in place, the existing view to the east is essentially unaltered. Only upon extremely close examination can the distant turbines be perceived on the horizon. This is the case, even under the extremely clear conditions illustrated in the selected photo. Under more overcast conditions, the blade tips would be imperceptible. Despite the fact that the turbines occupy 26 degrees of the 124-degree horizon illustrated in the context photo, their distance and lack of prominence against the sky, along with the likely focus of viewers on foreground wildlife, will minimize the effect of the WTGs on scenic quality and viewer experience. Rating panel members were consistent in their evaluation of the visual impact of the project, assigning VIA scores ranging from 9.2 to 13.8 (average score = 11.9). These scores indicate no reduction of points in comparison to the existing view and the view remains partially retained. As such, the visual impact at this KOP will be negligible. Panel members noted that "Viewer distance and color of the turbines limits visibility of the Facility and does not perceptibly change this view" and that "There is no noticeable change in the view, especially when competing with the existing tall, thin objects dotted along the horizon."

Considering the scale contrast, compatibility, and spatial dominance factors that influenced the visual impact rating at this KOP, panel ratings indicated that the WTGs present minimal scale contrast and are compatible with the existing seascape features and user activities. The rating panel also suggested that the WTGs are subordinate relative to other seascape features present in this view. Consistent with the anticipated scale contrast, compatibility, and spatial dominance impacts associated with the Project, panel members assigned Project visibility an average VTL of 1 from this KOP.

Visual Threshold Level (VTL)

1 An object/phenomenon that is near the extreme limit of visibility. It could not be seen by a person who was unaware of it in advance and looking for it. Even under those circumstances, the object can be seen only after looking at it closely for an extended period.

Principles of Composition and Factors Affecting Visual Impact Summary

Design Elements	Description
Focal Point	Horizon, but obstructed by tall grass and perennial plants in foreground.
Order	Smooth natural paving, highly textured foreground plant edge, short meadow grass and thin strip of background vegetation on the horizon with a large view to the sky.
Visual Clutter	Foreground vegetation mass.
Movement	Vegetation movement in the wind.
Duration & Frequency of View	Short Term/Fleeting Occasional
Atmospheric Conditions	Clear, cloud cover or haze would reduce visibility.
Lighting Direction	Side-Lit
Scenic or Recreational Value	State Wildlife Management Area - Viewing and interacting with nature;; Tuckahoe WMA.

Compatibility and Contrast Rating Average

Tuckahoe WMA			
Resource	Compatibility	Scale	Spatial Dominance
Water Resources	0.5	0.5	0.5
Landform	1.0	1.0	1.0
Vegetation	1.0	1.0	1.0
Land Use	1.0	1.0	1.0
User Activity	1.0	1.0	1.0

1 – Compatible	1 – Minimal	1 – Subordinate
2 – Somewhat Compatible	2 – Moderate	2 – Co-Dominant
3 – Not Compatible	3 – Severe	3 – Dominant

EMC01 Tuckahoe WMA

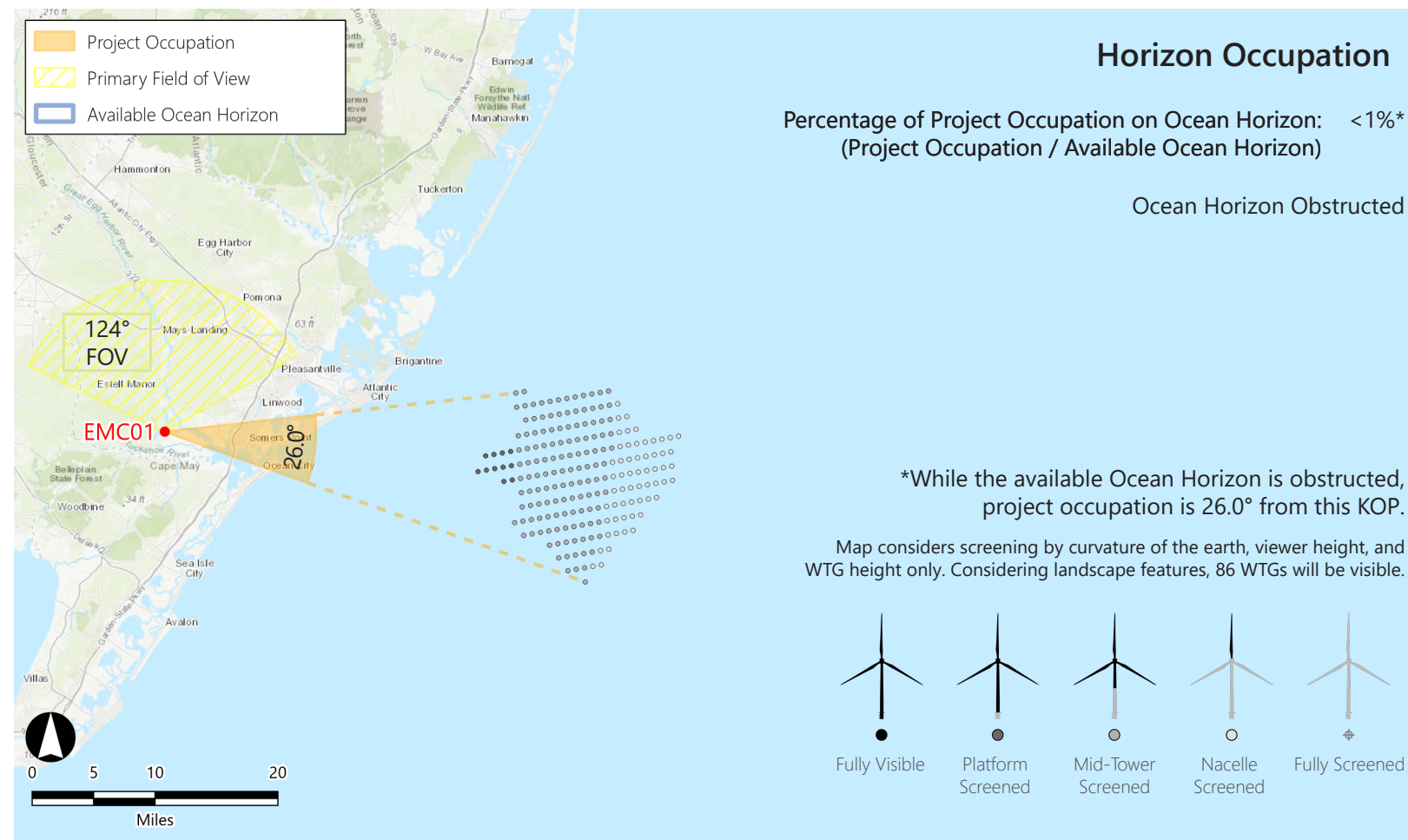
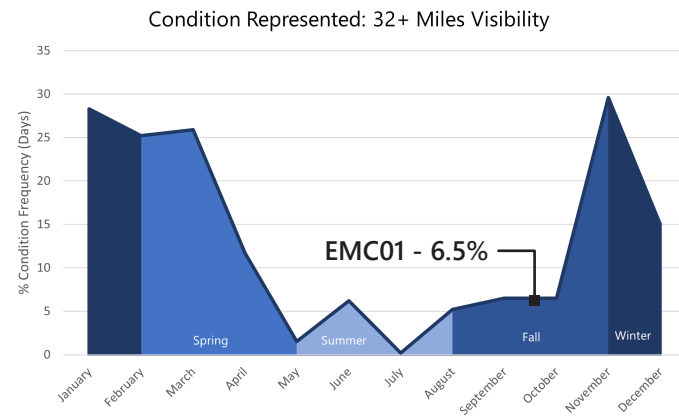
Estell Manor City, Atlantic County, New Jersey

KOP Information

Primary Field of View: North
 Distance to Closest WTG: 25.7 miles
 Camera Height: 15.98 ft
 User Groups: Residents, Tourists

Atmospheric Perspective

The effect the atmosphere has on the appearance of an object as viewed from a distance.



WTG Color Contrast

Color Contrast Rating:

Turbine [Grey Box] } 1.37
 Background [Light Blue Box]

Lighting Condition: Side lit
 Season: Fall
 Sky Condition: Fair
 Atmospheric Condition: > 10 Miles

SIMILAR VIEWING PARAMETERS:

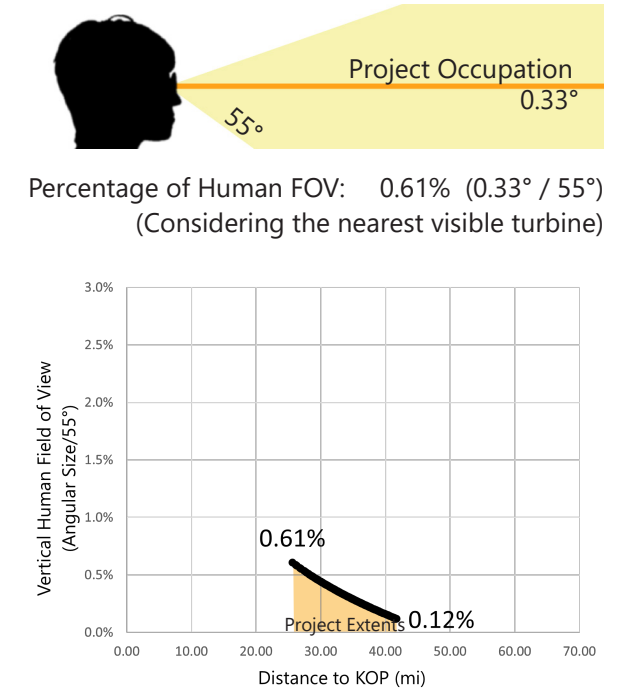
KOP SIC02 illustrates the project from 27.35 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Visibility Data Not Available

See KOP OC04 for similar conditions



Vertical Occupation



Existing Conditions



Printed at 100% the resulting photosimulation size is 15 inches wide by 10 inches high. At this size and focal length, the photosimulation should be viewed from a distance of 21 inches.



This scale is designed to insure the photosimulation images are printed at the intended size.

Photosimulation



Atlantic Shores Offshore Wind Project

Outer Continental Shelf - New Jersey
Key Observation Point: EMC01 - Tuckahoe WMA
Attachment E: Photosimulations; Page 128 of 159

Printed at 100% the resulting photosimulation size is 15 inches wide by 10 inches high. At this size and focal length, the photosimulation should be viewed from a distance of 21 inches.



This scale is designed to insure the photosimulation images are printed at the intended size.