

Assessment table on this sheet for more details.

SCENARIO 5 INTERVISIBILITY ASSESSMENT FROM KEY OBSERVATION POINT

Maryland Offshore Wind Project, OCS-A 0490	18.6	938	Visible
Skipjack, OCS-A 0519	35	853	N/A
Garden State Offshore Wind, OCS-A 0482	36.7	853	N/A
Ocean Wind 2, OCS-A 0532	63	906	N/A
Ocean Wind 1, OCS-A 0498	74.5	906	N/A
Atlantic Shores South, OCS-A 0499	87.1	1049	N/A
Atlantic Shores North, OCS-A 0549	100.1	1049	N/A
Coastal Virginia Offshore Wind (C-Lease), OCS-A 0483	82.8	869	N/A
Coastal Virginia Offshore Wind (Research Lease), OCS-A 0497	91.2	607	Developed But Beyond Visible Distance
Atlantic Shores Offshore Wind Bight (NY Bight), OCS-A 0541	107.3	853	N/A
Invenergy Wind Offshore (NY Bight), OCS-A 0542	108.1	853	N/A

Information on the neighboring offshore development projects is based on the most current information available.

Assateague Island National Seashore

¹ "The Best Paper Format and Viewing Distance to Represent the Scope and Scale of Visual Impacts", Journal of Landscape Architecture, 4-2019, pp. 142-151, J. Palmer ² Sheppard, S. 1989. Visual Simulation: A User's Guide for Architects, Engineers, and Planners. New York: Van Nostrand Rheinhold.

The Maryland Offshore Wind Project will either use two large OSSs only at interior locations within the array or four small OSSs throughout the array. For the purpose of the simulations, the largest OSS that may be used at a particular location has been simulated.

Site Name: Location: Date: Time: Coordinates Landscape Zo

Scenario 2, Maryland Offshore Wind Project and Projects Already or Considered Constructed Scenario 3, Project Construction by 2030 Scenario 4, Project Construction by 2030 Without Maryland Offshore Wind Project Scenario 5, Maryland Wind Without Other Foreseeable Future Changes

Scenario 5 depicts conditions that are anticipated for the Maryland Offshore Wind Project OCS-A 0490 once completed, including preexisting project construction for Coastal Virginia Offshore Wind (Research Lease) OCS-A 0497, but with no further changes or construction beyond that. The simulations produced for Scenario 5 visualize all such projects that are determined by the intervisibility assessment to be visible from KOP 3, Assateague Island National Seashore.

All simulated WTGs use monopile foundation structures, and all are oriented in the same direction with the centermost WTG facing directly towards the camera. The simulated WTGs use RAL 9010 Pure White paint color and the same lighting scheme that was outlined in US Wind's Visual Impact Assessment. As a point of reference, a 1049' tall structure drops completely below the horizon at a distance of 48.5 statute miles from a 5.1' tall viewer at this KOP.

To approximate the field of view represented by a 16.5" panorama it should be printed on an 11" x 17" sheet of paper and viewed from 8 inches away¹. For the most realistic experience when viewing in a digital format, position your computer screen 20" away and adjust the PDF viewing software's zoom so that the calibration bar matches what's instructed on the simulation sheet.

In all cases care must be taken to not over or underrepresent the visual contrasts². Typical binocular human field of view is assumed to be 124-degrees horizontal and 55degrees vertical.

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SITE INFORMATION

	Assateague Island National Seashore
	Assateague, MD
	3/22/2023
	8:55 AM (*5:35 PM)
(Lat/Lon WGS84):	38.192, -75.156
one:	Barren Land (Rock/Sand/Clay) - Beach

Scenario 1, Pre-Buildout of Maryland Offshore Wind Project

Sheet 1 – Simulation Context and Intervisibility Assessment Sheet 2 – Project Development and Visibility Summary Sheet 3 – Existing Conditions Panorama View (124°) Sheet 4 – Panorama View (124°) with Simulations without Project Extents Sheet 5 – Panorama View (124°) with Simulations and Project Extents Sheet 6 – Single Frame (50-mm Lens) Simulation and Project Extents Sheet 7 – Supplemental High Contrast Single Frame (40°) View (5:35 PM)*

KOP 3 ASSATEAGUE ISLAND NATIONAL SEASHORE, MARYLAND

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 5, Maryland Wind Without Other Foreseeable Future Changes





Scenario 5 Visibility of Nearest Turbine to Key Observation Point

Closer to Maryland Offshore Wind Project

1000 ft Based on findings from the Intervisibility Assessment the 853' following developments are excluded 938' 853' 906' 906' from this visibility matrix due to their 500 ft distance from the key observation point: 843' • Coastal Virginia Offshore Wind (C-90% Lease) OCS-A 0483 Horizon • Coastal Virginia Offshore Wind (Research Lease) OCS-A 0497 0 ft, MLLW -• Atlantic Shores Offshore Wind **Maryland Offshore** Bight (NY Bight) OCS-A 0541 Skipjack **Garden State** Ocean Wind 2 Ocean Wind 1 Wind Project • Invenergy Wind Offshore (NY Bight) OCS-A 0542 Excluded From Scenario 5 **Excluded From Scenario 5** Visible **Excluded From Scenario 5** Excluded From Scenario 5 Assessment Assessment Assessment Assessment # Turbines 121 N/A N/A N/A N/A # Turbines Visible 121 N/A N/A N/A N/A # Nacelle FAA Lights Visible 121 N/A N/A N/A N/A # Mid-Tower FAA Lights Visible 101 N/A N/A N/A N/A N/A # Substations* 4 N/A N/A N/A # Substations Visible 0 N/A N/A N/A N/A Minimum Distance from KOP to Turbines (mi) N/A N/A N/A 18.6 N/A Maximum Distance from KOP to Turbines (mi) 30.2 N/A N/A N/A N/A N/A N/A N/A N/A Nearest Turbine – Vertical Extent of Turbine Visible (ft) 843 Farthest Turbine - Vertical Extent of Turbine Visible (ft) 594 N/A N/A N/A N/A 90% N/A Nearest Turbine – Vertical Extent of Turbine Visible (%) N/A N/A N/A Farthest Turbine - Vertical Extent of Turbine Visible (%) 63% N/A N/A N/A N/A Mid-Tower FAA Light Height (ft) 271 N/A N/A N/A N/A 528 N/A N/A N/A N/A Hub Height (ft) Nacelle Top FAA Light Height (ft) 542 N/A N/A N/A N/A 938 N/A N/A N/A Blade Tip Height (ft) N/A Rotor Diameter (ft) 820 N/A N/A N/A N/A

*The Maryland Offshore Wind Project will either use two large OSSs only at interior locations within the array or four small OSSs throughout the array. For the purpose of the simulations, the largest OSS that may be used at a particular location has been simulated.

Information on the neighboring offshore development projects is based on the most current information available.

Shaded green defines projects excluded from current scenario.

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 5, Maryland Wind Without Other Foreseeable Future Changes

SHEET 2 - PROJECT DEVELOPMENT AND VISIBILITY SUMMARY

Project Extents Visible from this KOP in the Current Scenario



KOP 3 ASSATEAGUE ISLAND NATIONAL SEASHORE, MARYLAND







ENVIRONMENT	
Weather Conditions:	Cloudy
Temperature:	46° F
Humidity:	90%
Lighting Conditions:	Overcast
Visibility:	10 Miles
VIEW AND CAMERA DETAILS	
Ground Elevation (ft msl):	13.3
Camera/Viewing Elevation (ft msl):	18.3
Camera Used for Simulation Photograph	y: Nikon D850
Camera Lens Brand, Type, Focal Length:	Nikon fixed 50 mm
Photo Resolution:	1200 DPI
Horizontal Field of View (Panoramas):	124°
Horizontal Field of View (Single Frame 50)
mm Lens):	39.6°
Atmospheric Refraction Coefficient (k):	0.143

VIEWING INSTRUCTIONS: To approximate the field of view represented by a 16.5" panorama simulation, it should be printed on an 11" x 17" sheet of paper and viewed from 8 inches away¹. For the most realistic experience when viewing in a digital format, position your computer screen 20" away and adjust the PDF viewing software's zoom so that the calibration bar is 1 inch long:

In all cases care must be taken to not over or underrepresent the visual contrasts². Typical binocular human field of view is assumed to be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

KOP 3 ASSATEAGUE ISLAND NATIONAL SEASHORE, MARYLAND

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 5, Maryland Wind Without Other Foreseeable Future Changes

1" Measured On Screen – View from 20" Away

SHEET 3 - EXISTING CONDITIONS PANORAMA VIEW (124°)







ENVIRONMENT		
Weather Conditions:	Cloudy	
Temperature:	46° F	
Humidity:	90%	
Lighting Conditions:	Overcast	
Visibility:	10 Miles	
VIEW AND CAMERA DETAILS		
Ground Elevation (ft msl):	13.3	
Camera/Viewing Elevation (ft msl):	18.3	
Camera Used for Simulation Photography	/: Nikon D850	
Camera Lens Brand, Type, Focal Length:	Nikon fixed 50 mm	
Photo Resolution:	1200 DPI	
Horizontal Field of View (Panoramas):	124°	
Horizontal Field of View (Single Frame 50		
mm Lens):	39.6°	
Atmospheric Refraction Coefficient (<i>k</i>):	0.143	

VIEWING INSTRUCTIONS: To approximate the field of view represented by a 16.5" panorama simulation, it should be printed on an 11" x 17" sheet of paper and viewed from 8 inches away¹. For the most realistic experience when viewing in a digital format, position your computer screen 20" away and adjust the PDF viewing software's zoom so that the calibration bar is 1 inch long:

In all cases care must be taken to not over or underrepresent the visual contrasts². Typical binocular human field of view is assumed to be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

KOP 3 ASSATEAGUE ISLAND NATIONAL SEASHORE, MARYLAND

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 5, Maryland Wind Without Other Foreseeable Future Changes

1" Measured On Screen – View from 20" Away

SHEET 4 - PANORAMA VIEW (124°) WITH SIMULATIONS WITHOUT **PROJECT EXTENTS**









ENVIRONMENT	
Weather Conditions:	Cloudy
Temperature:	46° F
Humidity:	90%
Lighting Conditions:	Overcast
Visibility:	10 Miles
VIEW AND CAMERA DETAILS	
Ground Elevation (ft msl):	13.3
Camera/Viewing Elevation (ft msl):	18.3
Camera Used for Simulation Photography	/: Nikon D850
Camera Lens Brand, Type, Focal Length:	Nikon fixed 50 mm
Photo Resolution:	1200 DPI
Horizontal Field of View (Panoramas):	124°
Horizontal Field of View (Single Frame 50	
mm Lens):	39.6°
Atmospheric Refraction Coefficient (k):	0.143

VIEWING INSTRUCTIONS: To approximate the field of view represented by a 16.5" panorama simulation, it should be printed on an 11" x 17" sheet of paper and viewed from 8 inches away¹. For the most realistic experience when viewing in a digital format, position your computer screen 20" away and adjust the PDF viewing software's zoom so that the calibration bar is 1 inch long:

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1" Measured On Screen – View from 20" Away

KOP 3 ASSATEAGUE ISLAND NATIONAL SEASHORE, MARYLAND

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 5, Maryland Wind Without Other Foreseeable Future Changes

SHEET 5 - PANORAMA VIEW (124°) WITH SIMULATIONS AND **PROJECT EXTENTS**



Maryland Offshore Wind Project



Graphic shows which specific portion of the human field of view (124°) is visible in this single frame (40°) photo.

VIEWING INSTRUCTIONS: To approximate the field of view represented by a 15.7" single frame simulation captured with a 50-mm lens it should be printed on an 11" x 17" sheet of paper and viewed from 22 inches away¹. For the most realistic experience when viewing in a digital format, position your computer screen 20" away and adjust the PDF viewing software's zoom so that the calibration bar is 1 inch long:

1" Measured On Screen - View from 20" Away

In all cases care must be taken to not over or underrepresent the visual contrasts². Typical binocular human field of view is assumed to be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations. Mr.

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 5, Maryland Wind Without Other Foreseeable Future Changes

KOP 3 ASSATEAGUE ISLAND NATIONAL SEASHORE, MARYLAND

SHEET 6 - SINGLE FRAME (50-mm LENS) SIMULATION AND PROJECT EXTENTS

Maryland Offshore Wind Project

Graphic shows which specific portion of the human field of view (124°) is visible in this single frame (40°) photo.

VIEWING INSTRUCTIONS: To approximate the field of view represented by a 15.7" single frame simulation captured with a 50-mm lens it should be printed on an 11" x 17" sheet of paper and viewed from 22 inches away¹. For the most realistic experience when viewing in a digital format, position your computer screen 20" away and adjust the PDF viewing software's zoom so that the calibration bar is 1 inch long:

view is assumed to be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

1" Measured On Screen – View from 20" Away In all cases care must be taken to not over or underrepresent the visual contrasts². Typical binocular human field of

SHEET 7 - SUPPLEMENTAL HIGH CONTRAST SINGLE FRAME (40°) VIEW (5:35 PM)

KOP 3 ASSATEAGUE ISLAND NATIONAL SEASHORE, MARYLAND

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 5, Maryland Wind Without Other Foreseeable Future Changes