

OCS-A 0483, OCS-A 0497, OCS-A 0541, and OCS-A 0542 are located beyond the extent of this map. These lease areas are determined by the Intervisibility Assessment to be beyond visible distance from the KOP. See the Intervisibility Assessment table on this sheet for more details.

Dover

Delaware

Bay

Delaware Seashore

Boardwalk & Wreck Site

Ocean City Boardwalk A

Assateague Island

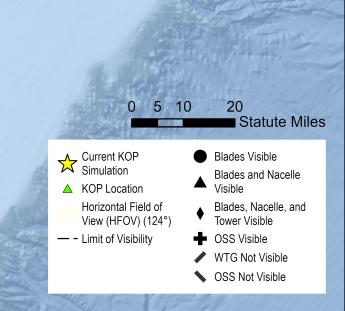
**National Seashore** 

State Park

84th Street

Beach

**Bethany Beach** 



#### SCENARIO 1 INTERVISIBILITY ASSESSMENT FROM KEY OBSERVATION POINT

Development	Minimum Distance from KOP to Turbines (mi)	Maximum Blade Height of Nearest Turbine (Feet)	Visibility Status This Scenario
Maryland Offshore Wind Project, OCS-A 0490	33.6	938	Not Developed
Skipjack, OCS-A 0519	23.1	853	Not Developed
Garden State Offshore Wind, OCS-A 0482	15.9	853	Not Developed
Ocean Wind 2, OCS-A 0532	25.9	906	Not Developed
Ocean Wind 1, OCS-A 0498	33.8	906	Visible
Atlantic Shores South, OCS- A 0499	45	1049	Visible
Atlantic Shores North, OCS- A 0549	55.7	1049	Not Developed
Coastal Virginia Offshore Wind (C-Lease), OCS-A 0483	134.6	869	Developed But Beyond Visible Distance
Coastal Virginia Offshore Wind (Research Lease), OCS-A 0497	143.4	607	Developed But Beyond Visible Distance
Atlantic Shores Offshore Wind Bight (NY Bight), OCS- A 0541	73.2	853	Not Developed
Invenergy Wind Offshore (NY Bight), OCS-A 0542	74.3	853	Not Developed

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



<sup>1</sup> "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 <sup>2</sup> Sheppard, S. 1989. Visual Simulation: A User's Guide for Architects, Engineers, and Planners. New York: Van Nostrand Rheinhold.

Site Name: Location: Date: Time: Landscape Zone:

Constructed

#### SCENARIO DESCRIPTION AND ASSUMPTIONS

Scenario 1 depicts conditions that are anticipated prior to construction of the Maryland Offshore Wind Project, which includes Coastal Virginia Offshore Wind (Research Lease) OCS-A 0497 constructed in 2020, Coastal Virginia Offshore Wind (C-Lease) OCS-A 0483, Ocean Wind 1 OCS-A 0498, and Atlantic Shores South OCS-A 0499. From KOP 24, Cape May Lighthouse, the intervisibility assessment indicates that Ocean Wind 1 OCS-A 0498, and Atlantic Shores South OCS-A 0499 are both potentially visible, and while Coastal Virginia Offshore Wind (Research Lease) OCS-A 0497 and Coastal Virginia Offshore Wind (C-Lease) OCS-A 0483 projects are both constructed they are too distant to be visible. The simulations produced for Scenario 1 visualize the Ocean Wind 1 and Atlantic Shores South projects as seen from the elevated observation deck of the KOP 24 Cape May Lighthouse.

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 58.0 statute miles from a camera height above ground with an elevation of 153.8' at this KOP.

#### SHEET INDEX AND VIEWING INSTRUCTIONS

In all cases care must be taken to not over or underrepresent the visual contrasts<sup>2</sup>. Typical binocular human field of view is assumed to be 124-degrees horizontal and 55degrees vertical.

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 1, Pre-Buildout of Maryland Offshore Wind Project

#### SITE INFORMATION

Cape May Lighthouse Cape May Point, NJ 3/25/2023 12:20 PM Coordinates (Lat/Lon WGS84): 38.931, -74.958 Barren Land (Rock/Sand/Clay) - Beach

#### **CUMULATIVE VISUAL EFFECTS SCENARIOS (CURRENT IS BOLD)**

Scenario 1, Pre-Buildout of Maryland Offshore Wind Project Scenario 2, Maryland Offshore Wind Project and Projects Already or Considered

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

- Sheet 1 Simulation Context Information
- Sheet 2 Intervisibility Assessment
- Sheet 3 Project Development and Visibility Summary
- Sheet 4 Existing Conditions Panorama View (124°)
- Sheet 5 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

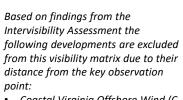
To approximate the field of view represented by a 16.5" panorama it should be printed on an 11" x 17" sheet of paper and viewed from 8 inches  $away^1$ . For the most realistic experience when viewing in a digital format, position your computer screen 20" away and adjust the PDF viewing software's zoom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

## KOP 24 CAPE MAY LIGHTHOUSE, NEW JERSEY

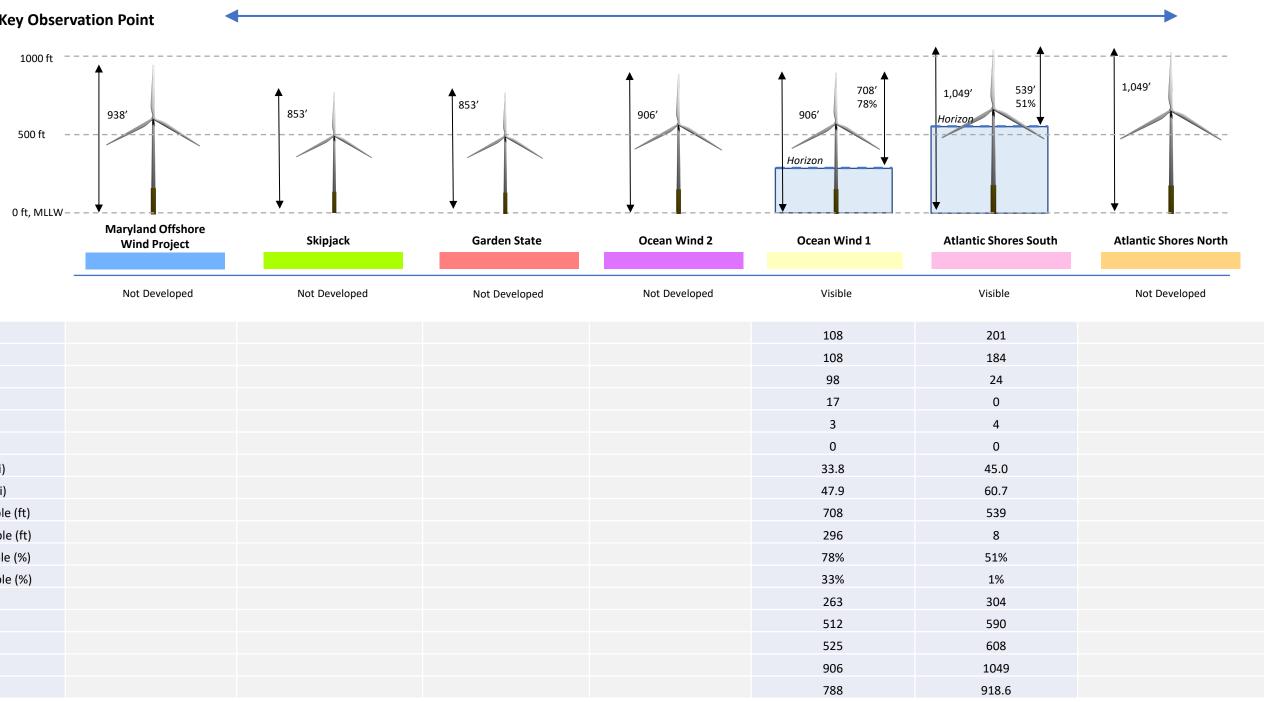
# SHEET 1 - SIMULATION CONTEXT AND INTERVISIBILITY ASSESSMENT

Atlantic Shores South	Proje
Ocean Wind 1	

Scenario 1 Visibility of Nearest Turbine to Key Observation Point



- Coastal Virginia Offshore Wind (C-Lease) OCS-A 0483
- Coastal Virginia Offshore Wind (Research Lease) OCS-A 0497
- Atlantic Shores Offshore Wind Bight (NY Bight) OCS-A 0541
- Invenergy Wind Offshore (NY Bight) OCS-A 0542



# Turbines			108
# Turbines Visible			108
# Nacelle FAA Lights Visible			98
# Mid-Tower FAA Lights Visible			17
# Substations			3
# Substations Visible			0
Minimum Distance from KOP to Turbines (mi)			33.8
Maximum Distance from KOP to Turbines (mi)			47.9
Nearest Turbine – Vertical Extent of Turbine Visible (ft)			708
Farthest Turbine – Vertical Extent of Turbine Visible (ft)			296
Nearest Turbine – Vertical Extent of Turbine Visible (%)			78%
Farthest Turbine – Vertical Extent of Turbine Visible (%)			33%
Mid-Tower FAA Light Height (ft)			263
Hub Height (ft)			512
Nacelle Top FAA Light Height (ft)			525
Blade Tip Height (ft)			906
Rotor Diameter (ft)			788

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

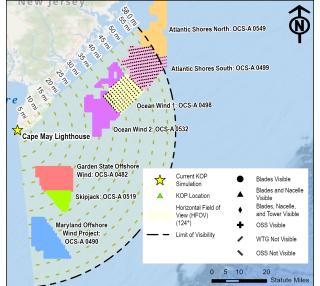
Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 1, Pre-Buildout of Maryland Offshore Wind Project

#### ect Extents Visible from this KOP in the Current Scenario

## KOP 24 CAPE MAY LIGHTHOUSE, NEW JERSEY

#### SHEET 2 - PROJECT DEVELOPMENT AND VISIBILITY SUMMARY RC







ENVIRONMENT		VIEWING INSTRUCTIONS:
Weather Conditions:	Clear/Calm	printed on an 11" x 17" sh viewing in a digital format
Temperature:	54° F	that the calibration bar is
Humidity:	49%	
Lighting Conditions:	Clear/Sunny	
Visibility:	10 Miles	In all cases care must be ta
VIEW AND CAMERA DETAILS		view is assumed to be 124
Ground Elevation (ft msl):	148.3	
Camera/Viewing Elevation (ft msl):	153.3	
Camera Used for Simulation Photography:	Nikon D850	
Camera Lens Brand, Type, Focal Length:	Nikon Fixed 50 mm	
Photo Resolution:	1200 DPI	Γ
Horizontal Field of View (Panoramas):	124°	
Horizontal Field of View (Single Frame 50		
mm Lens):	39.6°	SHEET
Atmospheric Refraction Coefficient (k):	0.143	•••==•

To approximate the field of view represented by a 16.5" panorama simulation, it should be sheet of paper and viewed from 8 inches away<sup>1</sup>. For the most realistic experience when at, position your computer screen 20" away and adjust the PDF viewing software's zoom so s 1 inch long:

taken to not over or underrepresent the visual contrasts<sup>2</sup>. Typical binocular human field of 24-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

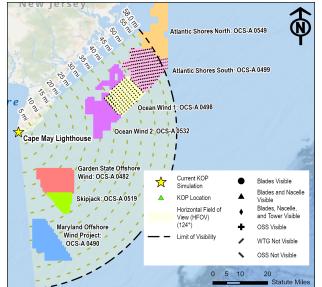
1" Measured On Screen – View from 20" Away

### KOP 24 CAPE MAY LIGHTHOUSE, NEW JERSEY

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 1, Pre-Buildout of Maryland Offshore Wind Project

# T 3 - EXISTING CONDITIONS PANORAMA VIEW (124°)







ENVIRONMENT		VIEWING INSTRUCTION
Weather Conditions:	Clear/Calm	printed on an 11" x 17" viewing in a digital form
Temperature:	54° F	that the calibration bar
Humidity:	49%	
Lighting Conditions:	Clear/Sunny	
Visibility:	10 Miles	In all cases care must b
VIEW AND CAMERA DETAILS		view is assumed to be 2
Ground Elevation (ft msl):	148.3	
Camera/Viewing Elevation (ft msl):	153.3	
Camera Used for Simulation Photograp	ohy: Nikon D850	
Camera Lens Brand, Type, Focal Length	n: Nikon Fixed 50 mm	
Photo Resolution:	1200 DPI	
Horizontal Field of View (Panoramas):	124°	SHEET 4 - PAN
Horizontal Field of View (Single Frame	50	JILLI 4 - PAN
mm Lens):	39.6°	
Atmospheric Refraction Coefficient (k)	: 0.143	

DNS: To approximate the field of view represented by a 16.5" panorama simulation, it should be 7" sheet of paper and viewed from 8 inches away<sup>1</sup>. For the most realistic experience when rmat, position your computer screen 20" away and adjust the PDF viewing software's zoom so ar is 1 inch long:

1" Measured On Screen – View from 20" Away

be taken to not over or underrepresent the visual contrasts<sup>2</sup>. Typical binocular human field of e 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

# KOP 24 CAPE MAY LIGHTHOUSE, NEW JERSEY

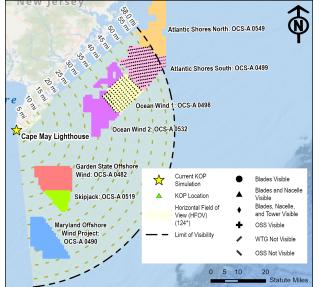
Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 1, Pre-Buildout of Maryland Offshore Wind Project

# NORAMA VIEW (124°) WITH SIMULATIONS WITHOUT **PROJECT EXTENTS**



Atlantic Shores South
Ocean Wind 1







ENVIRONMENT		
Weather Conditions:	Clear/Calm	printed on an 11" x 1 viewing in a digital fo
Temperature:	54° F	that the calibration b
Humidity:	49%	
Lighting Conditions:	Clear/Sunny	
Visibility:	10 Miles	In all cases care must
VIEW AND CAMERA DETAILS		view is assumed to be
Ground Elevation (ft msl):	148.3	
Camera/Viewing Elevation (ft msl):	153.3	
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°	SHEET
Horizontal Field of View (Single Frame 50		JULLI
mm Lens):	39.6°	
Atmospheric Refraction Coefficient (k):	0.143	

IONS: To approximate the field of view represented by a 16.5" panorama simulation, it should be 17" sheet of paper and viewed from 8 inches away<sup>1</sup>. For the most realistic experience when format, position your computer screen 20" away and adjust the PDF viewing software's zoom so bar is 1 inch long:

1" Measured On Screen – View from 20" Away

st be taken to not over or underrepresent the visual contrasts<sup>2</sup>. Typical binocular human field of be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

## **KOP 24 CAPE MAY LIGHTHOUSE, NEW JERSEY**

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 1, Pre-Buildout of Maryland Offshore Wind Project

# 5 – PANORAMA VIEW (124°) WITH SIMULATIONS AND **PROJECT EXTENTS TRC**

