

distance from the KOP. See the Intervisibility

Assessment table on this sheet for more details.

# SCENARIO 2 INTERVISIBILITY ASSESSMENT FROM KEY OBSERVATION POINT

Development	Minimum Distance from KOP to	Maximum Blade Height of Nearest	Visibility Status This Scenario	
	Turbines (mi)	Turbine (Feet)	Tills Scellario	
Maryland Offshore Wind Project, OCS-A 0490	12.5	938	Visible	
Skipjack, OCS-A 0519	25.9	853	Not Developed	
Garden State Offshore Wind, OCS-A 0482	26.8	853	Not Developed	
Ocean Wind 2, OCS-A 0532	53.3	906	Not Developed	
Ocean Wind 1, OCS-A 0498	64.8	906	Developed But Beyond Visible Distance	
Atlantic Shores South, OCS- A 0499	77.5	1049	Developed But Beyond Visible Distance	
Atlantic Shores North, OCS- A 0549	90.2	1049	Not Developed	
Coastal Virginia Offshore Wind (C-Lease), OCS-A 0483	92.3	869	Developed But Beyond Visible Distance	
Coastal Virginia Offshore Wind (Research Lease), OCS-A 0497	101.2	607	Developed But Beyond Visible Distance	
Atlantic Shores Offshore Wind Bight (NY Bight), OCS- A 0541	98.4	853	Not Developed	
Invenergy Wind Offshore (NY Bight), OCS-A 0542	99.3	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

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.

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OSS Not Visible

#### SITE INFORMATION

Site Name: Ocean City Boardwalk Location: Ocean City, MD Date: 3/22/2023

Time: 12:45 PM (\*4:30 PM)

Coordinates (Lat/Lon WGS84): 38.328, -75.085

Landscape Zone: 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 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 DESCRIPTION AND ASSUMPTIONS

Scenario 2 depicts the same project conditions as those represented in Scenario 1 for Coastal Virginia Offshore Wind (Research Lease) OCS-A 0497, Coastal Virginia Offshore Wind (C-Lease) OCS-A 0483, Ocean Wind 1 OCS-A 0498, and Atlantic Shores South OCS-A 0499, but with the addition of the proposed construction of the Maryland Offshore Wind Project OCS-A 0490. Simulations produced for this scenario include the Maryland Offshore Wind Project and those Scenario 1 developments determined by the intervisibility assessment to be visible from KOP 1, Ocean City Boardwalk.

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 48.3 statute miles from a 5.1' tall viewer at this KOP.

#### SHEET INDEX AND VIEWING INSTRUCTIONS

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, Left View and Project Extents

Sheet 7 – Single Frame (50-mm Lens) Simulation, Right View and Project Extents

Sheet 8 – Supplemental High Contrast Single Frame (40°) View (4:30 PM)\*

To approximate the field of view represented by a  $16.5^{\prime\prime}$  panorama it should be printed on an  $11^{\prime\prime}$  x  $17^{\prime\prime}$  sheet of paper and viewed from 8 inches away<sup>1</sup>. For the most realistic experience when viewing in a digital format, position your computer screen  $20^{\prime\prime}$  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 contrasts<sup>2</sup>. Typical binocular human field of view is assumed to be 124-degrees horizontal and 55-degrees vertical.

### **KOP 1 OCEAN CITY BOARDWALK, MARYLAND**

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 2, Maryland Offshore Wind Project and Projects Already or Considered Constructed

SHEET 1 - SIMULATION CONTEXT AND INTERVISIBILITY ASSESSMENT

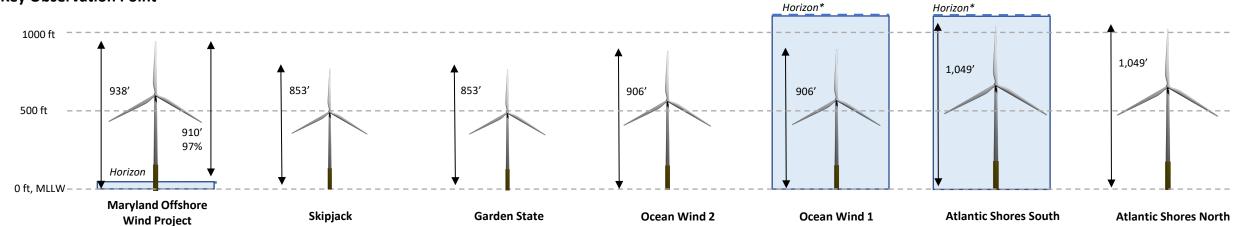


Closer to Maryland Offshore Wind Project

### **Scenario 2 Visibility of Nearest Turbine to Key Observation Point**

Based on findings from the Intervisibility Assessment the following developments are excluded from this visibility matrix due to their distance from the 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



	Visible	Not Developed	Not Developed	Not Developed	Developed But Beyond Visible Distance	Developed But Beyond Visible Distance	Not Developed
# Turbines	121				108	201	
# Turbines Visible	121				0	0	
# Nacelle FAA Lights Visible	121				0	0	
# Mid-Tower FAA Lights Visible	121				0	0	
# Substations**	4				3	4	
# Substations Visible	3				0	0	
Minimum Distance from KOP to Turbines (mi)	12.5				64.8	77.5	
Maximum Distance from KOP to Turbines (mi)	26.6				77.5	91.9	
Nearest Turbine – Vertical Extent of Turbine Visible (ft)	910				N/A	N/A	
Farthest Turbine – Vertical Extent of Turbine Visible (ft)	683				N/A	N/A	
Nearest Turbine – Vertical Extent of Turbine Visible (%)	97%				N/A	N/A	
Farthest Turbine – Vertical Extent of Turbine Visible (%)	73%				N/A	N/A	
Mid-Tower FAA Light Height (ft)	271				263	304	
Hub Height (ft)	528				512	590	
Nacelle Top FAA Light Height (ft)	542				525	608	
Blade Tip Height (ft)	938				906	1049	
Rotor Diameter (ft)	820				788	918.6	

<sup>\*</sup>All turbines for this development are below the horizon.

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

### **KOP 1 OCEAN CITY BOARDWALK, MARYLAND**

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 2, Maryland Offshore Wind Project and Projects Already or Considered Constructed

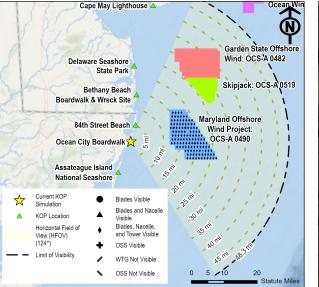
Farther from Maryland Offshore Wind Project

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



<sup>\*\*</sup>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.







#### **ENVIRONMENT**

Weather Conditions: Mostly cloudy, rain
Temperature: 61° F
Humidity: 74%
Lighting Conditions: Overcast
Visibility: 10 Miles

**VIEW AND CAMERA DETAILS** Ground Elevation (ft msl): 14.6 Camera/Viewing Elevation (ft msl): 19.6 Camera Used for Simulation Photography: Nikon D850 Camera Lens Brand, Type, Focal Length: Nikon Fixed 50 mm 1200 DPI Photo Resolution: 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 away<sup>1</sup>. 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 contrasts<sup>2</sup>. Typical binocular human field of view is assumed to be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

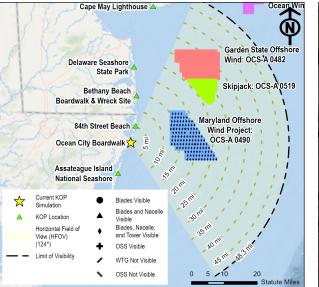
### **KOP 1 OCEAN CITY BOARDWALK, MARYLAND**

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 2, Maryland Offshore Wind Project and Projects Already or Considered Constructed

SHEET 3 - EXISTING CONDITIONS PANORAMA VIEW (124°)









### ENVIRONMENT

Weather Conditions:Mostly cloudy, rainTemperature:61° FHumidity:74%Lighting Conditions:OvercastVisibility:10 Miles

### **VIEW AND CAMERA DETAILS**

Ground Elevation (ft msl): 14.6
Camera/Viewing Elevation (ft msl): 19.6
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:

1" Measured On Screen – View from 20" Away

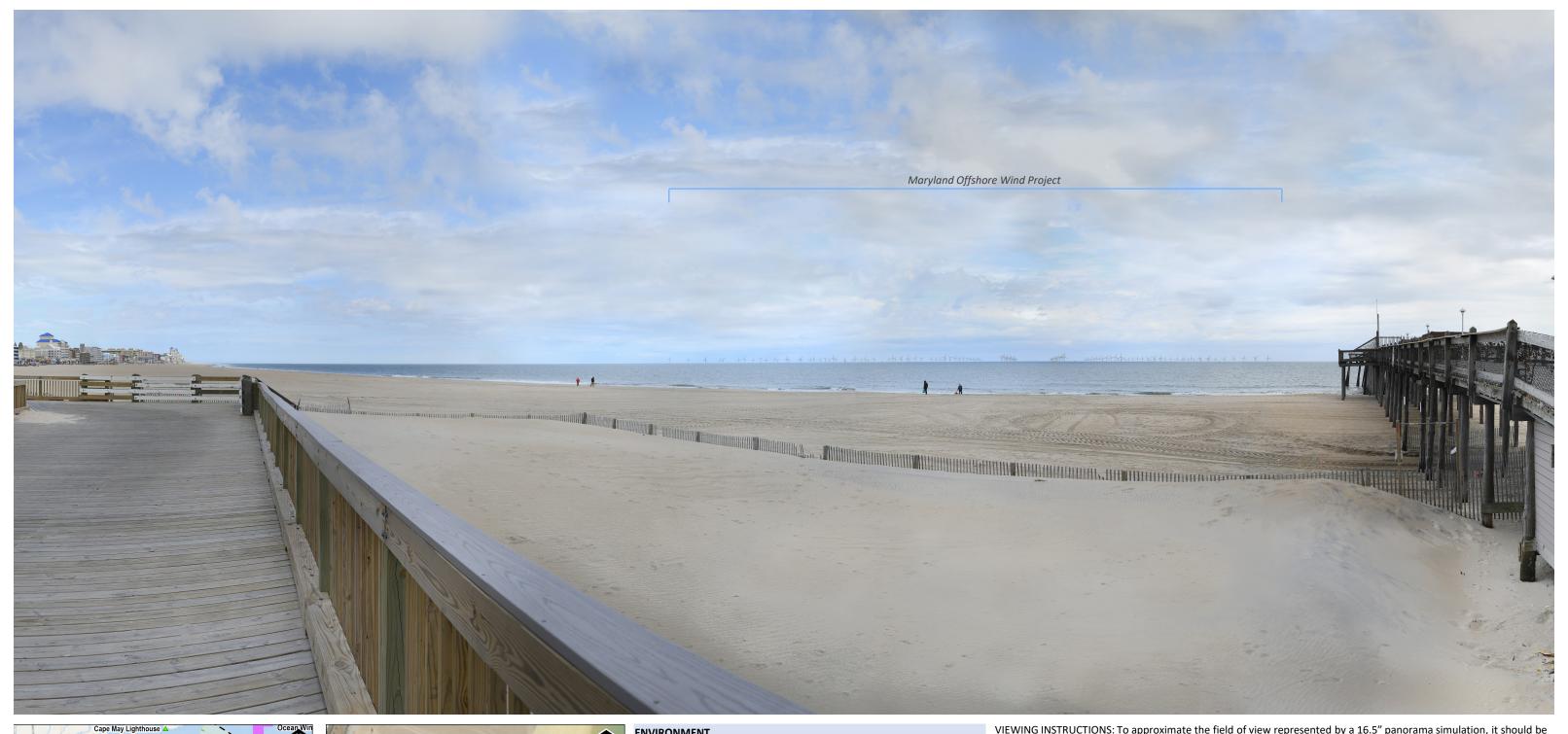
In all cases care must be taken to not over or underrepresent the visual contrasts<sup>2</sup>. Typical binocular human field of view is assumed to be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

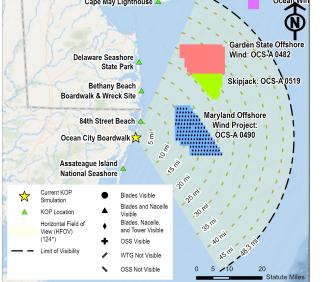
### **KOP 1 OCEAN CITY BOARDWALK, MARYLAND**

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 2, Maryland Offshore Wind Project and Projects Already or Considered Constructed

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









#### **ENVIRONMENT**

Weather Conditions: Mostly cloudy, rain Temperature: 61° F Humidity: 74% Lighting Conditions: Overcast 10 Miles

Atmospheric Refraction Coefficient (k):

Visibility: **VIEW AND CAMERA DETAILS** Ground Elevation (ft msl): 14.6 Camera/Viewing Elevation (ft msl): 19.6 Camera Used for Simulation Photography: Nikon D850 Camera Lens Brand, Type, Focal Length: Nikon Fixed 50 mm 1200 DPI Photo Resolution: Horizontal Field of View (Panoramas): 124° Horizontal Field of View (Single Frame 50 mm Lens): 39.6°

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 away<sup>1</sup>. 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 contrasts<sup>2</sup>. Typical binocular human field of view is assumed to be 124-degrees horizontal and 55-degrees vertical. See Sheet 1 for citations.

### **KOP 1 OCEAN CITY BOARDWALK, MARYLAND**

Maryland Offshore Wind Project Cumulative Visual Effects Assessment Simulations Scenario 2, Maryland Offshore Wind Project and Projects Already or Considered Constructed

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







