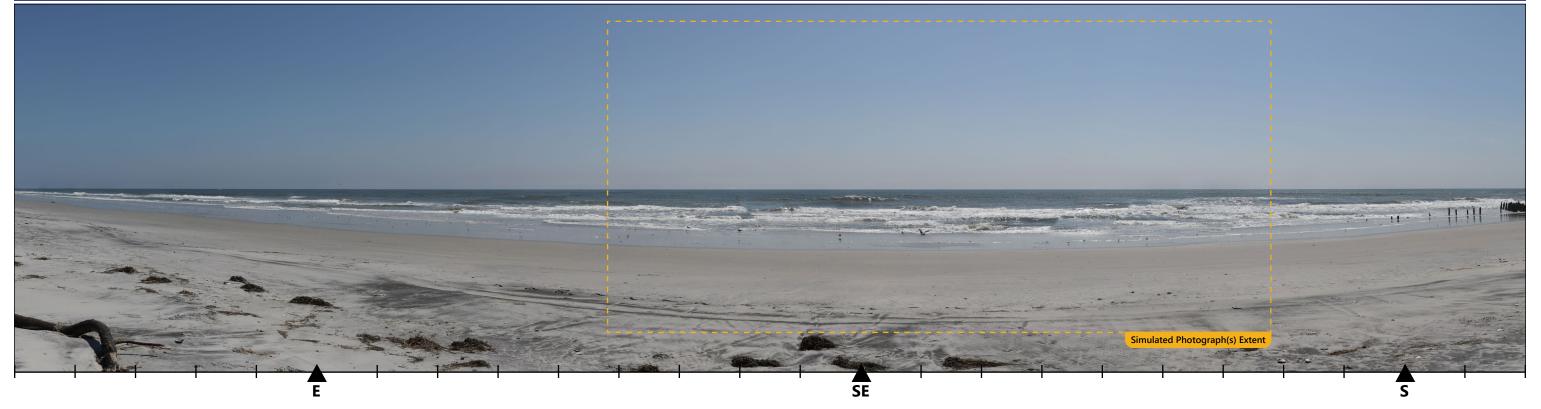
BC02 North Brigantine Natural Area - Alternative B

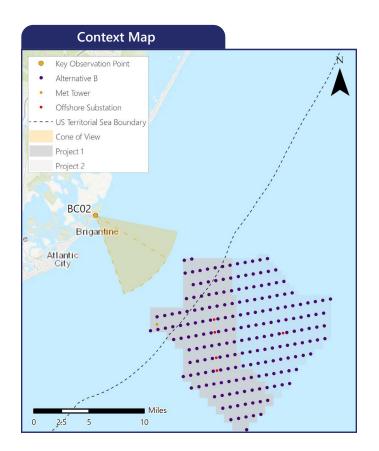
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

Page 1 of 159



The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken: 08/18/2020
Time: 12:00 PM
Temperature: 84°F
Humidity: 53%
Visibility: 10 miles
Wind Direction: West-southwest
Wind Speed: 3 mph
Conditions Observed: Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 9.03 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





WTG Color Contrast

Attachment E: Photosimulations

Page 2 of 159

Side lit

BC02 North Brigantine Natural Area - Alternative B

land

Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic

Warren

Grove

BC02

Atlantic

124°

FOV

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 9.03 miles

Camera Height: 11.06 ft

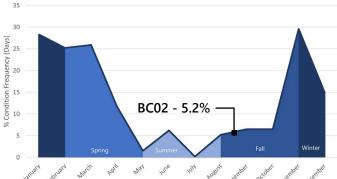
User Groups: Residents, Tourists,

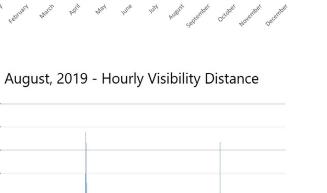
Fishermen

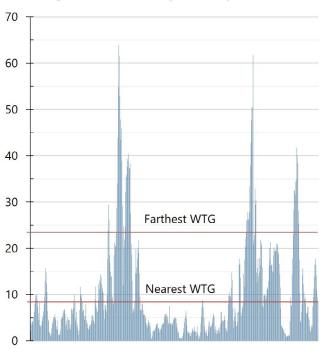
Atmospheric Perspective

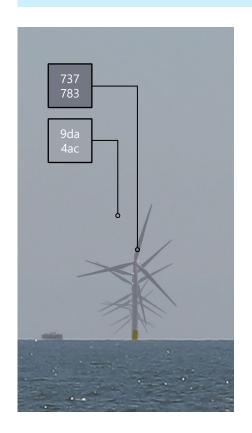
The effect the atmosphere has on the appearance of an object as viewed from a distance.

Condition Represented: 32+ Miles Visibility











Fully Visible

Platform

Screened

Mid-Tower

Screened

Horizon Occupation

Fully Screened

Nacelle

Screened

Percentage of Project Occupation on Ocean Horizon: 27.9%

(Project Occupation / Available Ocean Horizon)

Available Ocean Horizon: 180.7°

Lighting Condition:

Season: Summer

Sky Condition: Fair

Atmospheric Condition: >10 Miles

SIMILAR VIEWING PARAMETERS:

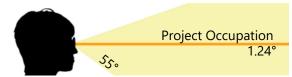
Color Contrast Rating:

Turbine

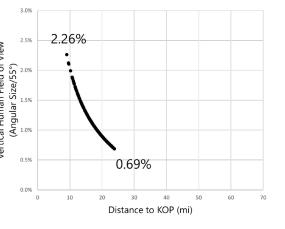
Background

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 2.26% (1.24° / 55°) (Considering the nearest visible turbine)





Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point. BC02 - North Brigantine Natural Area - Alternative B Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 3 of 48



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point. BC02 - North Brigantine Natural Area - Alternative B Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 4 of 48

BC02 North Brigantine Natural Area - Alternative C1

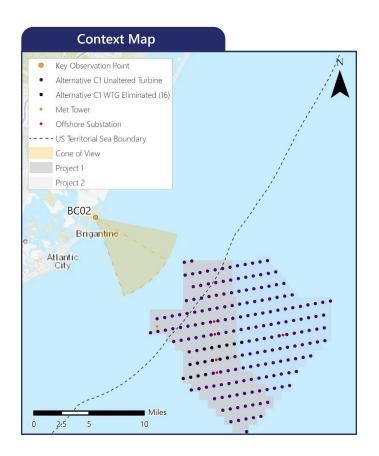
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

Page 5 of 159



The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 9.03 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





WTG Color Contrast

Attachment E: Photosimulations

Page 6 of 159

Side lit

BC02 North Brigantine Natural Area - Alternative C1

land

Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic

Warren

Grove

BC02

Atlantic

124°

FOV

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 9.03 miles

Camera Height: 11.06 ft

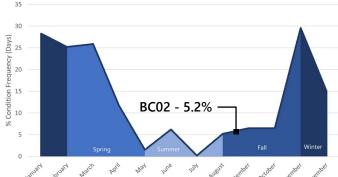
User Groups: Residents, Tourists,

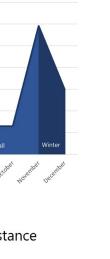
Fishermen

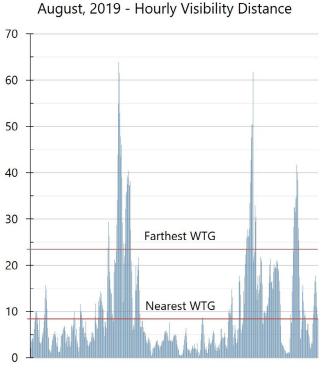
Atmospheric Perspective

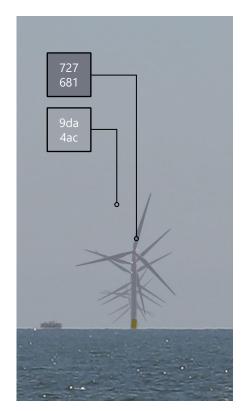
The effect the atmosphere has on the appearance of an object as viewed from a distance.

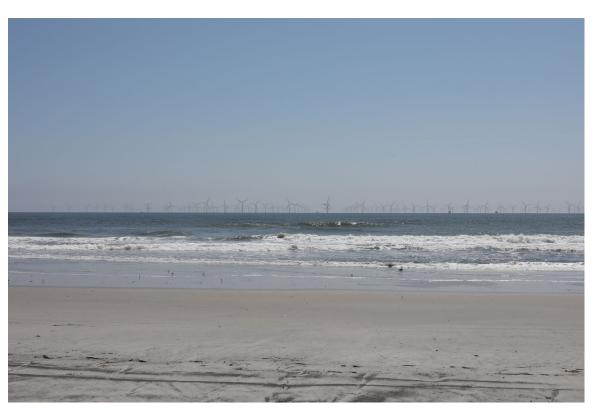
Condition Represented: 32+ Miles Visibility











Fully Visible

Platform

Screened

Mid-Tower

Screened

Horizon Occupation

Percentage of Project Occupation on Ocean Horizon: 27.9% (Project Occupation / Available Ocean Horizon)

Available Ocean Horizon: 180.7°

Fully Screened

Nacelle

Screened

Lighting Condition:

Background

Turbine

Color Contrast Rating:

Season: Summer

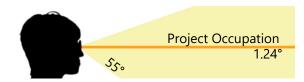
Sky Condition: Fair

Atmospheric Condition: >10 Miles

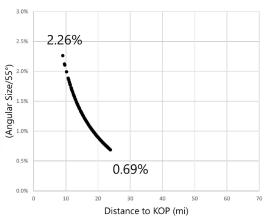
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 2.26% (1.24° / 55°) (Considering the nearest visible turbine)





Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative C1 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 7 of 48



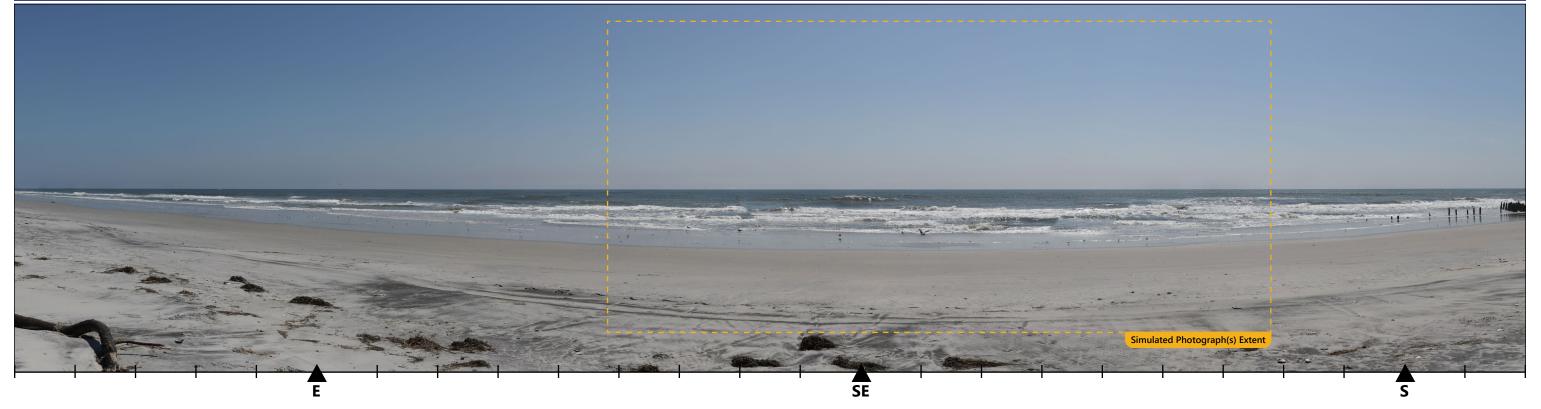
Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499 Key Observation Point: BC02 - North Brigantine Natural Area - Alternative C1 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 8 of 48

BC02 North Brigantine Natural Area - Alternative C2

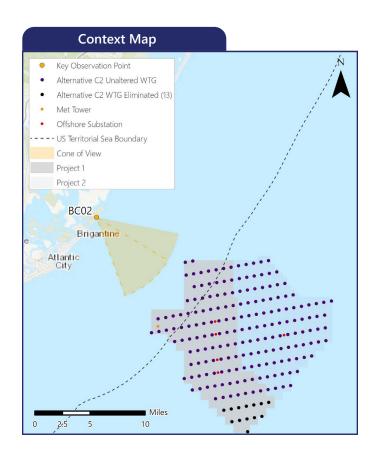
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 9.03 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





WTG Color Contrast

Attachment E: Photosimulations

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Side lit

BC02 North Brigantine Natural Area - Alternative C2

land

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 9.03 miles

Camera Height: 11.06 ft

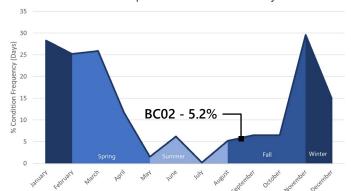
User Groups: Residents, Tourists,

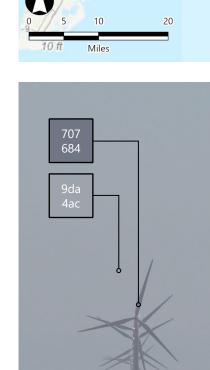
Fishermen

Atmospheric Perspective

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

Condition Represented: 32+ Miles Visibility





Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic



Horizon Occupation

Lighting Condition:

Background

Turbine

Color Contrast Rating:

Season: Summer

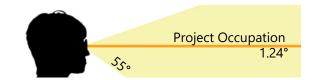
Sky Condition: Fair

Atmospheric Condition: >10 Miles

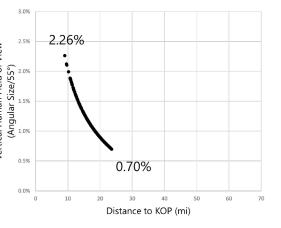
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

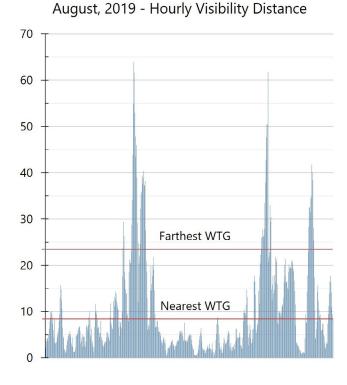
Vertical Occupation

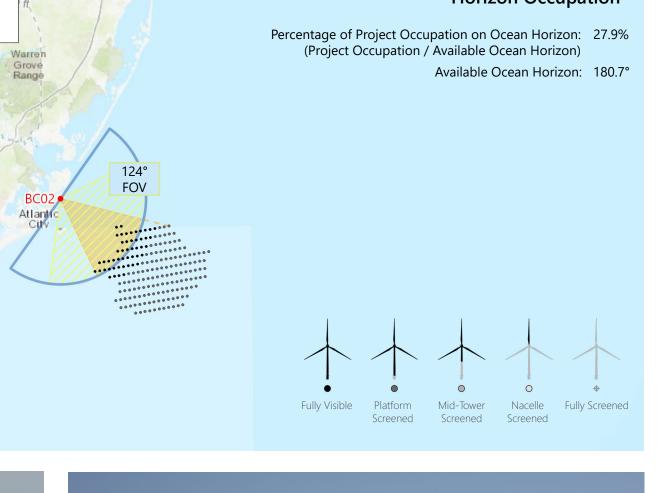


Percentage of Human FOV: 2.26% (1.24° / 55°) (Considering the nearest visible turbine)











Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative C2 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 11 of 48



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative C2 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 12 of 48

BC02 North Brigantine Natural Area - Alternative C3

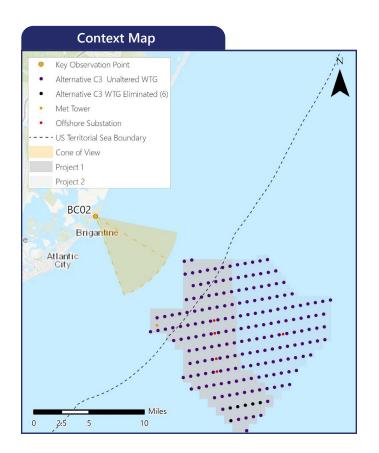
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 9.03 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





Attachment E: Photosimulations

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BC02 North Brigantine Natural Area - Alternative C3

Project Occupation

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 9.03 miles

Camera Height: 11.06 ft

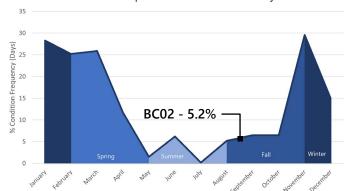
User Groups: Residents, Tourists,

Fishermen

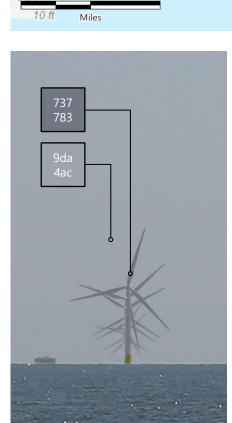
Atmospheric Perspective

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

Condition Represented: 32+ Miles Visibility



August, 2019 - Hourly Visibility Distance

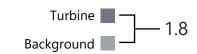




Horizon Occupation

WTG Color Contrast

Color Contrast Rating:



Lighting Condition: Side lit

Season: Summer

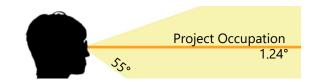
Sky Condition: Fair

Atmospheric Condition: >10 Miles

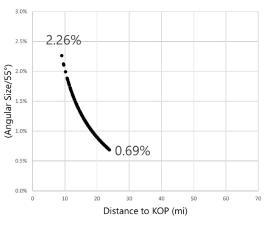
SIMILAR VIEWING PARAMETERS:

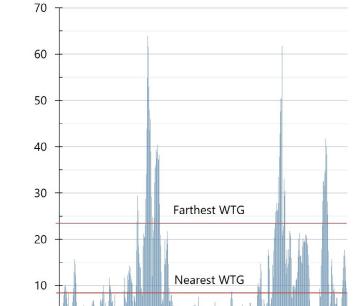
KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

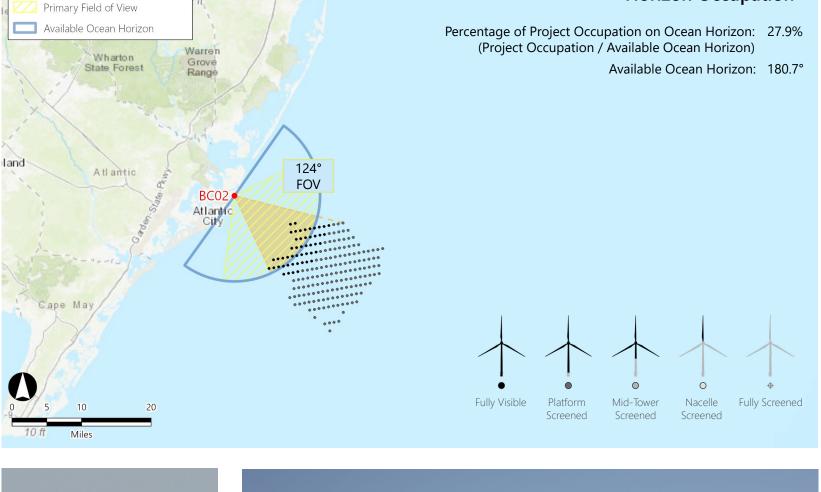
Vertical Occupation



Percentage of Human FOV: 2.26% (1.24° / 55°) (Considering the nearest visible turbine)









Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative C3 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 15 of 48



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative C3 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 16 of 48

BC02 North Brigantine Natural Area - Alternative D1

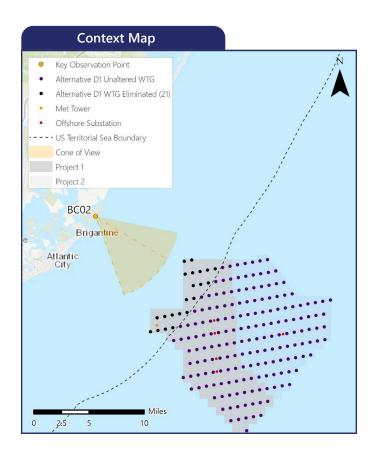
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 12.08 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





Attachment E: Photosimulations

Page 18 of 159

BC02 North Brigantine Natural Area - Alternative D1

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 12.08 miles

Camera Height: 11.06 ft

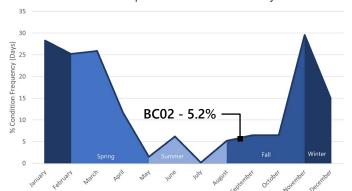
User Groups: Residents, Tourists,

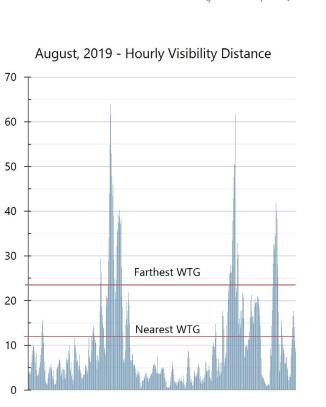
Fishermen

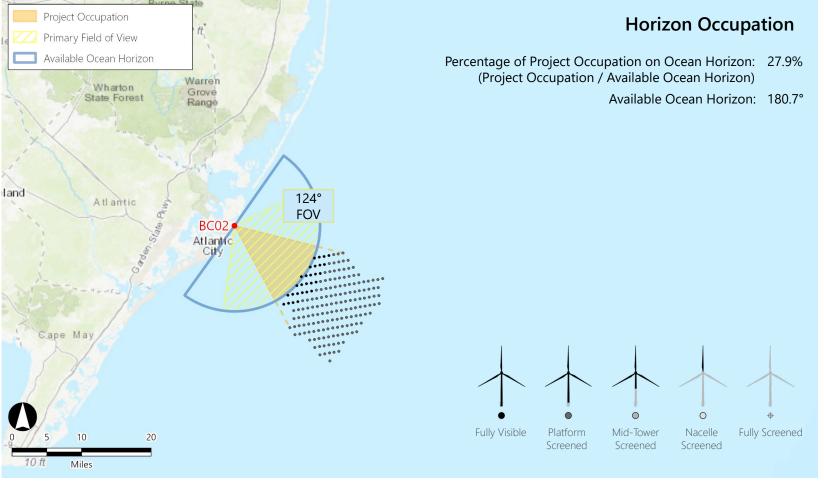
Atmospheric Perspective

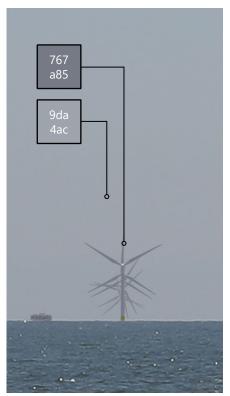
The effect the atmosphere has on the appearance of an object as viewed from a distance.

Condition Represented: 32+ Miles Visibility





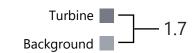






WTG Color Contrast

Color Contrast Rating:



Lighting Condition: Side lit

Season: Summer

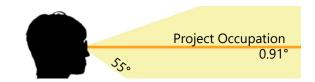
Sky Condition: Fair

Atmospheric Condition: >10 Miles

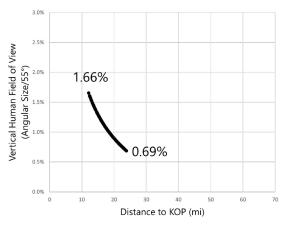
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 1.66% (0.91° / 55°) (Considering the nearest visible turbine)





Printed at 100% the resulting simulation s 15 inches wide by 10 inches high. At this siz focal length, the simulation should be vi from a distance of 21 inches.

Atlantic Shores Offshore Wind Project
Outer Continental Shelf OCS-A 0499
Key Observation Point RCO2 - North Rrigantine Natural Area - Alten

sservation Point: BCO2 - North Brigantine Natural Area - Alternative imulations: BOEM EIS Alternatives Visual Effects Analysis



BC02 North Brigantine Natural Area - Alternative D1

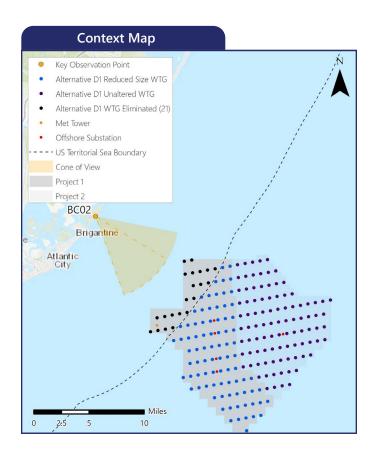
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

Page 21 of 159



The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 12.08 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





Attachment E: Photosimulations

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BC02 North Brigantine Natural Area - Alternative D1

land

Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic

Warren

Grove

BC02

Atlanti

124°

FOV

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 12.08 miles

Camera Height: 11.06 ft

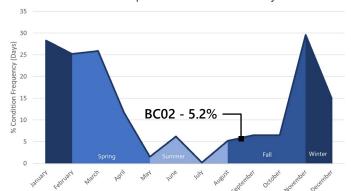
User Groups: Residents, Tourists,

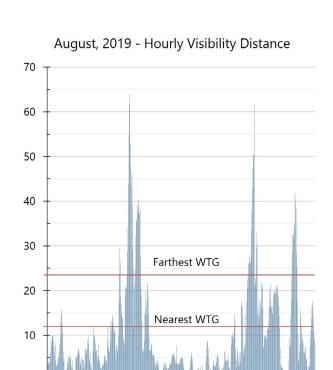
Fishermen

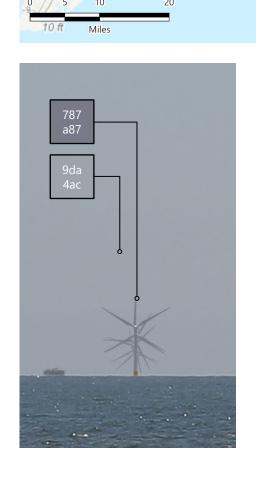
Atmospheric Perspective

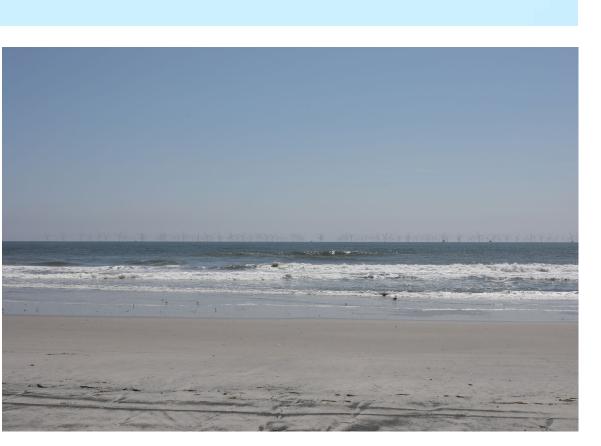
The effect the atmosphere has on the appearance of an object as viewed from a distance.

Condition Represented: 32+ Miles Visibility









Fully Visible

Platform

Screened

Mid-Tower

Screened

Nacelle

Screened

WTG Color Contrast

Horizon Occupation

Available Ocean Horizon: 180.7°

Fully Screened

Percentage of Project Occupation on Ocean Horizon: 27.9% (Project Occupation / Available Ocean Horizon)

Color Contrast Rating:



Lighting Condition: Side lit

Season: Summer

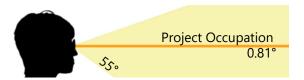
Sky Condition: Fair

Atmospheric Condition: >10 Miles

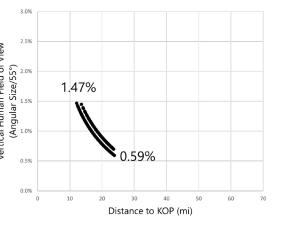
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 1.47% (0.81° / 55°) (Considering the nearest visible turbine)





Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499



BC02 North Brigantine Natural Area - Alternative D2

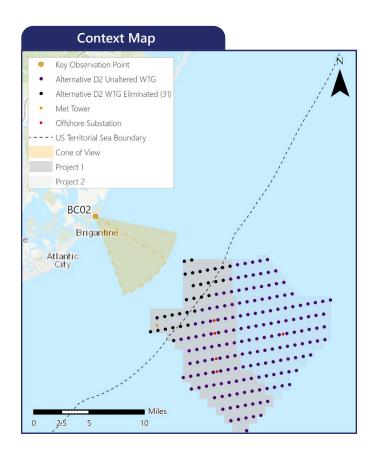
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

Page 25 of 159



The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 12.86 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





Attachment E: Photosimulations

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BC02 North Brigantine Natural Area - Alternative D2

land

Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic

Warren

Grove

BC02

Atlantic

124°

FOV

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

12.86 miles Distance to Closest WTG:

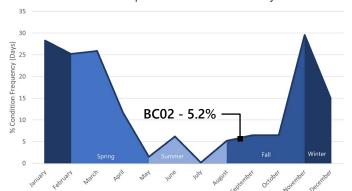
Camera Height: 11.06 ft

Residents, Tourists, **User Groups:** Fishermen

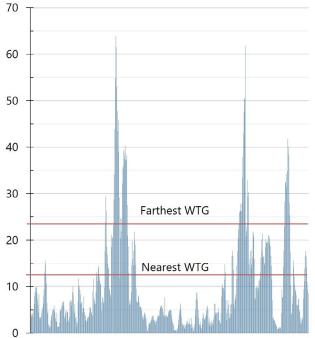
The effect the atmosphere has on the appearance of an object as viewed from a distance.

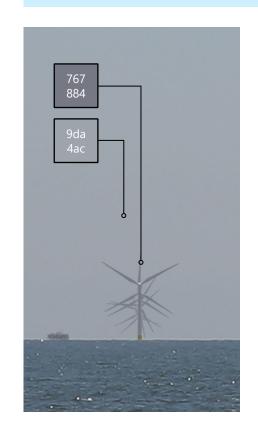
Atmospheric Perspective

Condition Represented: 32+ Miles Visibility











Fully Visible

Platform

Screened

Mid-Tower

Screened

Horizon Occupation

Percentage of Project Occupation on Ocean Horizon: 27.9% (Project Occupation / Available Ocean Horizon)

Available Ocean Horizon: 180.7°

Fully Screened

Nacelle

Screened

Lighting Condition:

Season: Summer

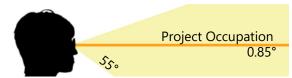
Sky Condition:

Atmospheric Condition: >10 Miles

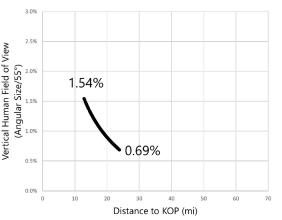
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 1.54% (0.85° / 55°) (Considering the nearest visible turbine)





WTG Color Contrast

Color Contrast Rating:



Side lit

Fair



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative D2 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 28 of 48

BC02 North Brigantine Natural Area - Alternative D2

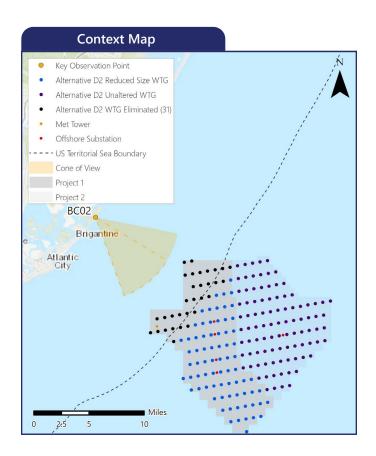
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 12.86 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





Attachment E: Photosimulations

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BC02 North Brigantine Natural Area - Alternative D2

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

12.86 miles Distance to Closest WTG:

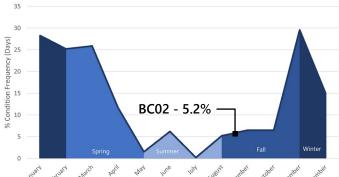
Camera Height: 11.06 ft

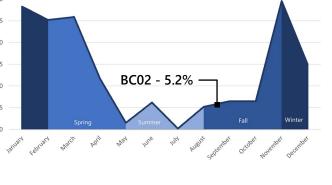
Residents, Tourists, **User Groups:** Fishermen

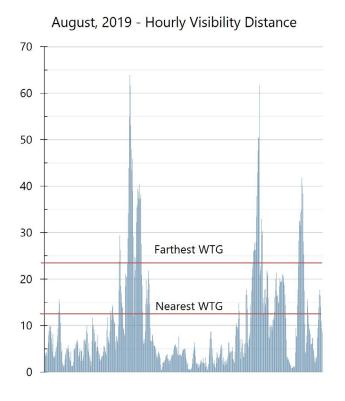
The effect the atmosphere has on the appearance of an object as viewed from a distance.

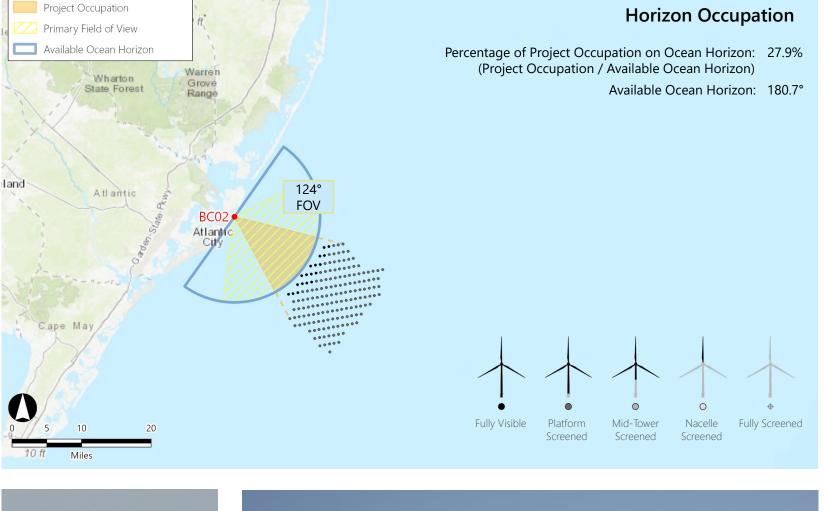
Atmospheric Perspective

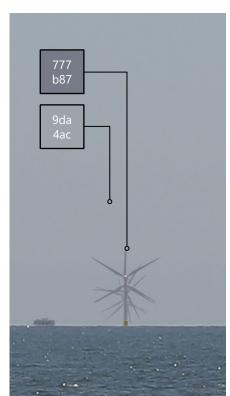
Condition Represented: 32+ Miles Visibility













WTG Color Contrast

Color Contrast Rating:



Lighting Condition: Side lit

Season: Summer

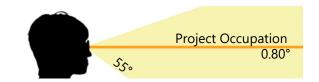
Sky Condition: Fair

Atmospheric Condition: >10 Miles

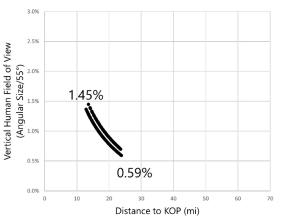
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 1.45% (0.80° / 55°) (Considering the nearest visible turbine)





Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499



BC02 North Brigantine Natural Area - Alternative D3

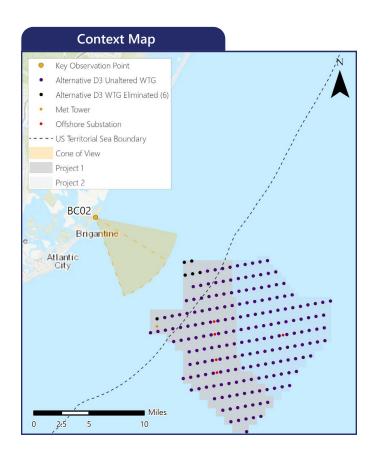
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 10.86 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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.





WTG Color Contrast

Attachment E: Photosimulations

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Side lit

BC02 North Brigantine Natural Area - Alternative D3

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

10.86 miles Distance to Closest WTG:

Camera Height: 11.06 ft

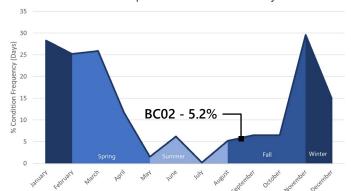
Residents, Tourists, **User Groups:**

Fishermen

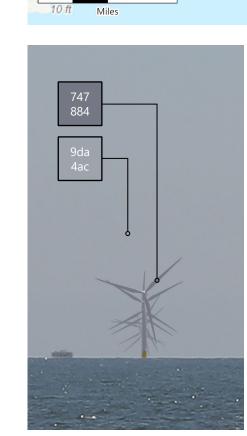
Atmospheric Perspective

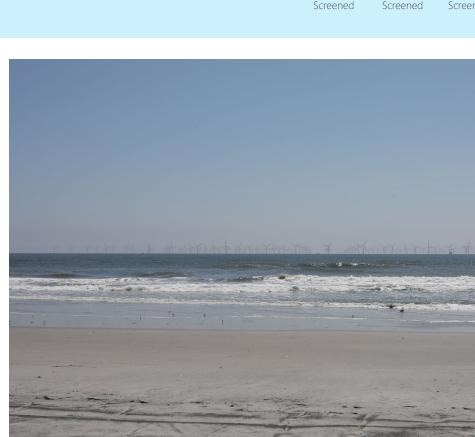
The effect the atmosphere has on the appearance of an object as viewed from a distance.

Condition Represented: 32+ Miles Visibility



August, 2019 - Hourly Visibility Distance





Horizon Occupation

Lighting Condition:

Background

Turbine

Color Contrast Rating:

Season: Summer

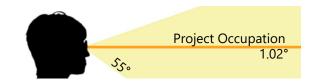
Sky Condition: Fair

Atmospheric Condition: >10 Miles

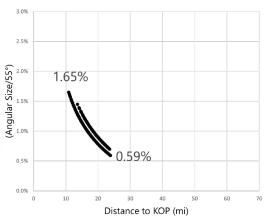
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation

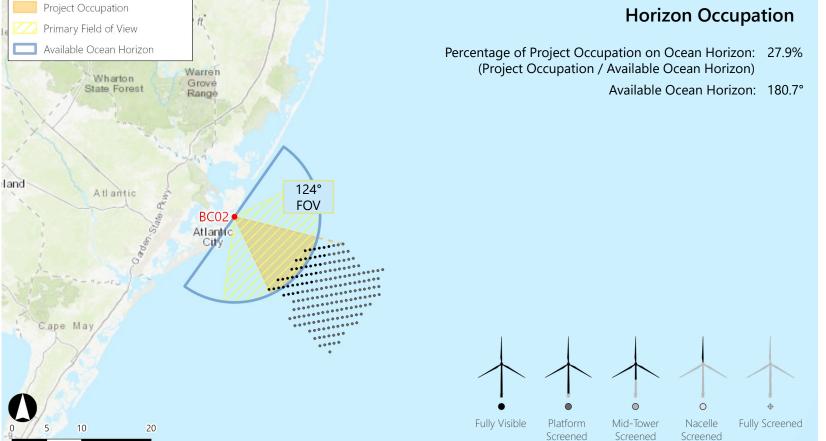


Percentage of Human FOV: 1.86% (1.02° / 55°) (Considering the nearest visible turbine)









70 60 50 40 30 Farthest WTG 20 Nearest WTG



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499 Key Observation Point: BC02 - North Brigantine Natural Area - Alternative D3 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 35 of 48

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

n. At this size and 0 1 in 1 nould be viewed This scale is designed to insure the images are printed at the intended



BC02 North Brigantine Natural Area - Alternative D3

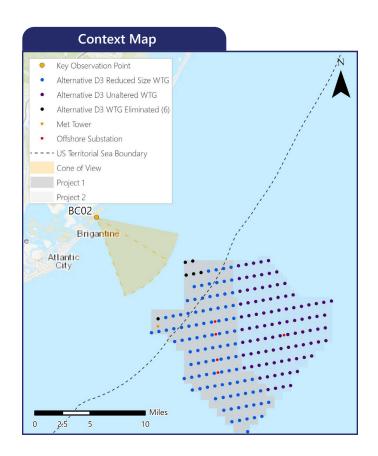
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 10.86 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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)





Attachment E: Photosimulations

Page 38 of 159

BC02 North Brigantine Natural Area - Alternative D3

land

Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic

Warren

Grove

BC02

Atlantic

124°

FOV

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

10.86 miles Distance to Closest WTG:

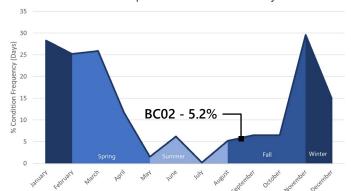
Camera Height: 11.06 ft

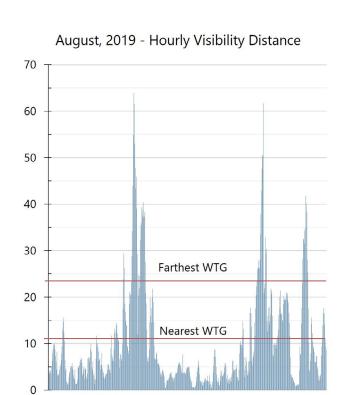
Residents, Tourists, **User Groups:** Fishermen

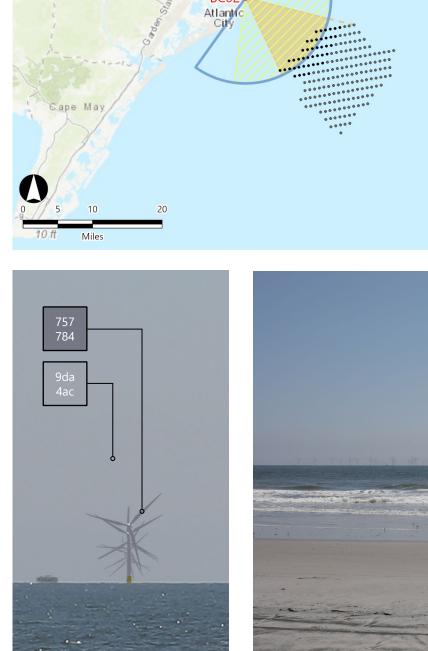
Atmospheric Perspective

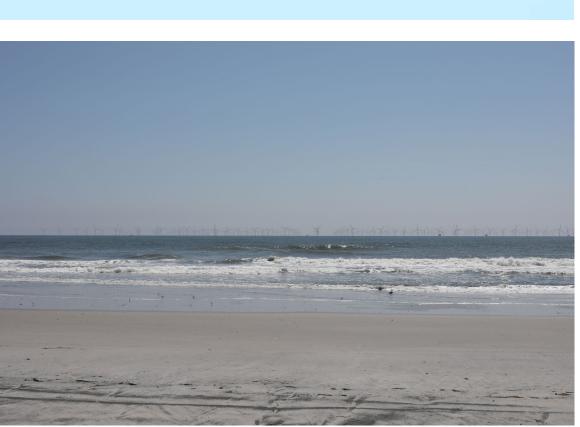
The effect the atmosphere has on the appearance of an object as viewed from a distance.

Condition Represented: 32+ Miles Visibility









Fully Visible

Platform

Screened

Mid-Tower

Screened

WTG Color Contrast Horizon Occupation

Percentage of Project Occupation on Ocean Horizon: 27.9% (Project Occupation / Available Ocean Horizon)

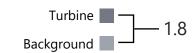
Available Ocean Horizon: 180.7°

Fully Screened

Nacelle

Screened

Color Contrast Rating:



Lighting Condition: Side lit

Season: Summer

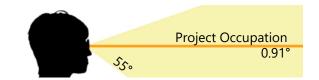
Sky Condition: Fair

Atmospheric Condition: >10 Miles

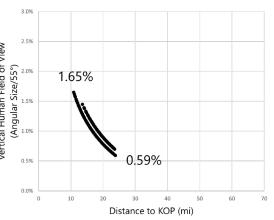
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 1.65% (0.91° / 55°) (Considering the nearest visible turbine)





Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499



BC02 North Brigantine Natural Area - Alternative E1

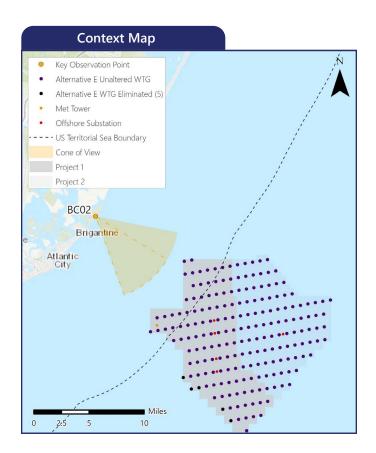
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine:

Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen

Southeast 9.03 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 11.06 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)





WTG Color Contrast

Attachment E: Photosimulations

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BC02 North Brigantine Natural Area - Alternative E1

land

Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic

Warren

Grove

BC02

Atlantic

124°

FOV

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 9.03 miles

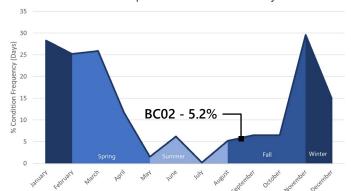
Camera Height: 11.06 ft

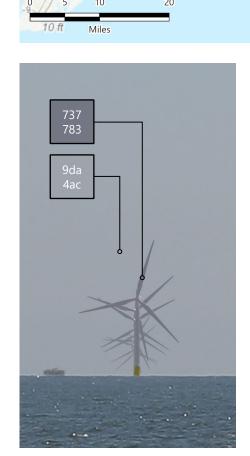
User Groups: Residents, Tourists, Fishermen

Atmospheric Perspective

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

Condition Represented: 32+ Miles Visibility







Fully Visible

Platform

Screened

Mid-Tower

Screened

Horizon Occupation

Percentage of Project Occupation on Ocean Horizon: 27.9% (Project Occupation / Available Ocean Horizon)

Available Ocean Horizon: 180.7°

Background

Fully Screened

Nacelle

Screened

Lighting Condition: Side lit

Season: Summer

Sky Condition: Fair

Atmospheric Condition: >10 Miles

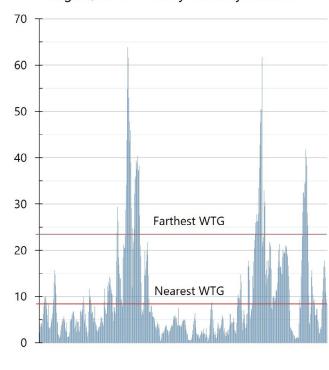
SIMILAR VIEWING PARAMETERS:

Color Contrast Rating:

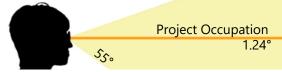
Turbine

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

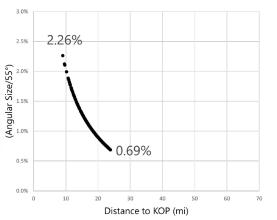
August, 2019 - Hourly Visibility Distance



Vertical Occupation



Percentage of Human FOV: 2.26% (1.24° / 55°) (Considering the nearest visible turbine)





Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative E1 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 43 of 48



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative E1 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 44 of 48

BC02 North Brigantine Natural Area - Alternative E2

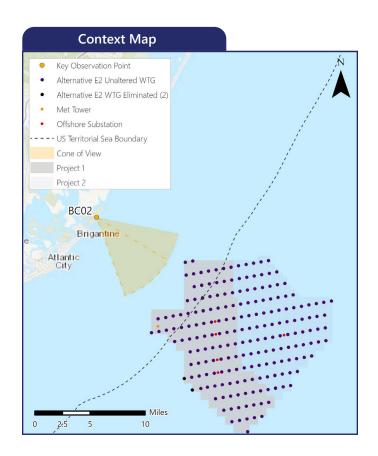
Brigantine City, Atlantic County, New Jersey

Attachment E: Photosimulations

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The image above is a +/- 124° panorama photograph from the North Brigantine Natural Area, panning clockwise from northeast-east (left) to south (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





Simulation Information

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine: Visually Sensitive Resource:

Environmental Information

Date Taken:08/18/2020Time:12:00 PMTemperature:84°FHumidity:53%Visibility:10 milesWind Direction:West-southwestWind Speed:3 mphConditions Observed:Fair

39.42954°N, 74.33968°W

Undeveloped Beach, Seascape (SCA)

Residents/Tourists, Fishermen Southeast

9.03 miles

North Brigantine State Natural Area

Photograph Information

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

11.06 feet AMSL

Notes

Camera Height:

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)





Attachment E: Photosimulations

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BC02 North Brigantine Natural Area - Alternative E2

Brigantine City, Atlantic County, New Jersey

KOP Information

Primary Field of View: East

Distance to Closest WTG: 9.03 miles

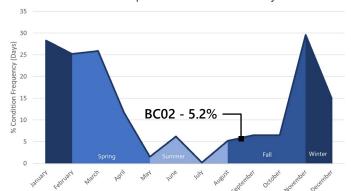
Camera Height: 11.06 ft

User Groups: Residents, Tourists,

Atmospheric Perspective

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

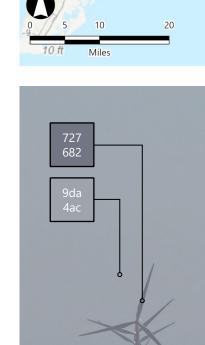
Condition Represented: 32+ Miles Visibility



August, 2019 - Hourly Visibility Distance

Farthest WTG

Nearest WTG



Project Occupation

Primary Field of View

Available Ocean Horizon

Wharton

State Forest

Atlantic

Warren

Grove

BC02

Atlantic

124°

FOV





Fully Visible

Platform

Screened

Mid-Tower

Screened

WTG Color Contrast

Color Contrast Rating:

Horizon Occupation

Available Ocean Horizon: 180.7°

Fully Screened

Nacelle

Screened

Percentage of Project Occupation on Ocean Horizon: 27.9% (Project Occupation / Available Ocean Horizon)



Lighting Condition: Side lit

Season: Summer

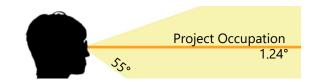
Sky Condition: Fair

Atmospheric Condition: >10 Miles

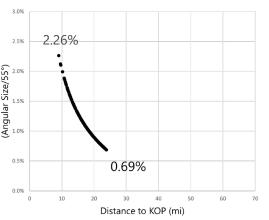
SIMILAR VIEWING PARAMETERS:

KOP LEHT02 Illustrates the project from 11.91 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during morning conditions.

Vertical Occupation



Percentage of Human FOV: 2.26% (1.24° / 55°) (Considering the nearest visible turbine)





70

60

50

40

30

20





Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499 Key Observation Point: BC02 - North Brigantine Natural Area - Alternative E2 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 47 of 48



Atlantic Shores Offshore Wind Project Outer Continental Shelf OCS-A 0499
Key Observation Point: BC02 - North Brigantine Natural Area - Alternative E2 Photosimulations: BOEM EIS Alternatives Visual Effects Analysis Page 48 of 48