



# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/7:50
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 16' 12.833"N
Longitude:	70° 12' 05.262"W
Elevation(±):	7.3 m (24 ft)
Nearest Turbine:	24.0 km (14.9 mi)

### Visual Setting

Resource Type:	Recreation, Historic Resources
Landscape Unit:	Ocean Beach, Coastal Dunes, Shoreline Residential
Viewer Groups	Residents, Vacationers, Recreational
Circumstances of View:	Stationary

Figure 11a  
**Madaket Beach**  
 Town of Nantucket, Nantucket Island, MA

### EXISTING VIEW

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/7:50
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 16' 12.833"N
Longitude:	70° 12' 05.262"W
Elevation(±):	7.3 m (24 ft)
Nearest Turbine:	24.0 km (14.9 mi)

### Visible Portion of Turbine

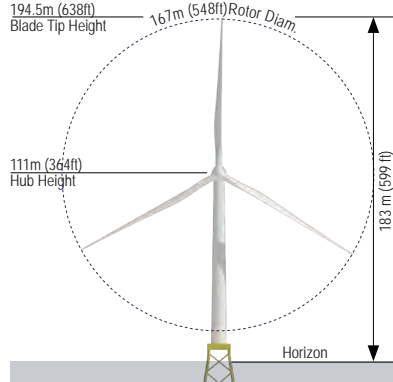


Figure 11b  
**Madaket Beach**  
 Town of Nantucket, Nantucket Island, MA

**SIMULATED VIEW**

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/7:50
Light Condition:	Side Light/Haze
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 16' 12.833"N
Longitude:	70° 12' 05.262"W
Elevation(±):	7.3 m (24 ft)
Nearest Turbine:	24.0 km (14.9 mi)

### Visible Portion of Turbine

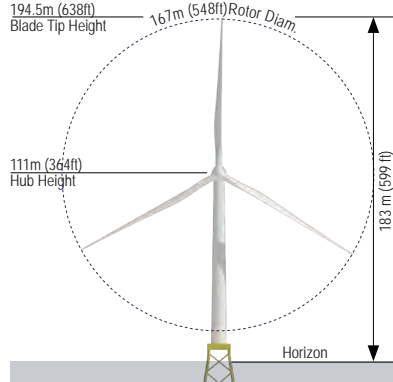


Figure 11c  
**Madaket Beach**  
 Town of Nantucket, Nantucket Island, MA

### SIMULATED VIEW - MODERATE HAZE

This visualization incorporates a simulated haze condition that reduces visibility of the WTGs to approximately 50%.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/7:50
Light Condition:	Side Light/Haze
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 16' 12.833"N
Longitude:	70° 12' 05.262"W
Elevation(±):	7.3 m (24 ft)
Nearest Turbine:	24.0 km (14.9 mi)

### Visible Portion of Turbine

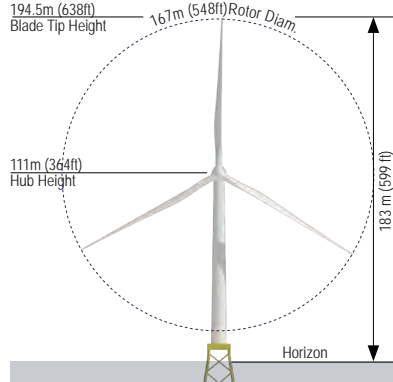


Figure 11d  
**Madaket Beach**  
 Town of Nantucket, Nantucket Island, MA

### SIMULATED VIEW - HEAVY HAZE

This visualization incorporates a simulated haze condition that substantially masks visibility of the WTGs.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/8:59
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 15' 07.545"N
Longitude:	70° 09' 09.227"W
Elevation(±):	3.7 m (12 ft)
Nearest Turbine:	25.3 km (15.7 mi)

### Visual Setting

Resource Type:	Recreation
Landscape Unit:	Ocean Beach, Coastal Dunes, Salt Pond/Tidal Marsh
Viewer Groups	Residents, Vacationers, Recreational
Circumstances of View:	Stationary

Figure 12a  
**Cisco Beach**  
 Town of Nantucket, Nantucket Island, MA

### EXISTING VIEW

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/8:59
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 15' 07.545"N
Longitude:	70° 09' 09.227"W
Elevation(±):	3.7 m (12 ft)
Nearest Turbine:	25.3 km (15.7 mi)

### Visible Portion of Turbine

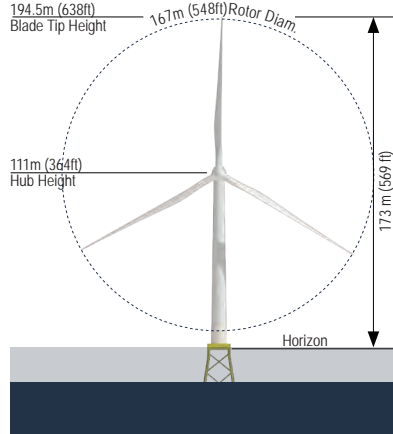


Figure 12b  
**Cisco Beach**  
 Town of Nantucket, Nantucket Island, MA

**SIMULATED VIEW**

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.

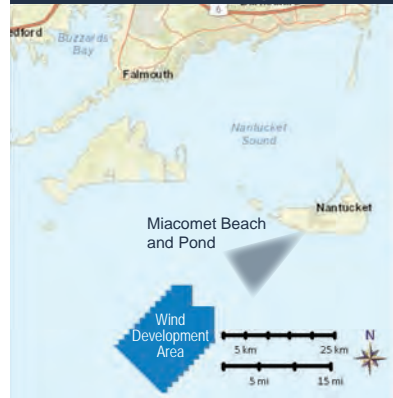




# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/10:17
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 14' 34.724"N
Longitude:	70° 07' 03.322"W
Elevation(±):	3.7 m (12 ft)
Nearest Turbine:	27.0 km (16.7 mi)

### Visual Setting

Resource Type:	Recreation, Historic Resources
Landscape Unit:	Ocean Beach, Coastal Dunes, Salt Pond/Tidal Marsh
Viewer Groups	Residents, Vacationers, Recreational
Circumstances of View:	Stationary

Figure 14a  
**Miacomet Beach and Pond**  
 Town of Nantucket, Nantucket Island, MA

**EXISTING VIEW**

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/10:17
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 14' 34.724"N
Longitude:	70° 07' 03.322"W
Elevation(±):	3.7 m (12 ft)
Nearest Turbine:	27.0 km (16.7 mi)

### Visible Portion of Turbine

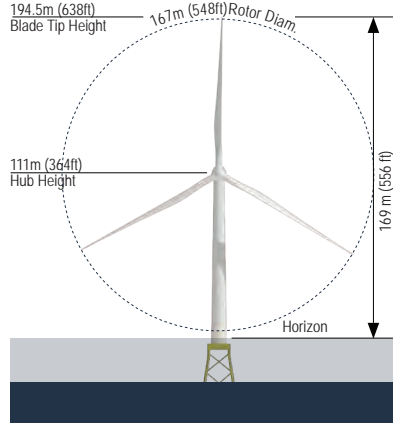


Figure 14b  
**Miacomet Beach and Pond**  
 Town of Nantucket, Nantucket Island, MA

**SIMULATED VIEW**

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/12:00
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 14' 34.260"N
Longitude:	70° 05' 39.788"W
Elevation(±):	3.7 m (12 ft)
Nearest Turbine:	28.5 km (17.7 mi)

### Visual Setting

Resource Type:	Recreation, Historic Resources
Landscape Unit:	Ocean Beach, Coastal Dunes, Salt Pond/Tidal Marsh
Viewer Groups	Residents, Vacationers, Recreational
Circumstances of View:	Stationary

Figure 15a  
**Surfside Beach**  
 Town of Nantucket, Nantucket Island, MA

### EXISTING VIEW

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/12:00
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 14' 34.260"N
Longitude:	70° 05' 39.788"W
Elevation(±):	3.7 m (12 ft)
Nearest Turbine:	28.5 km (17.7 mi)

### Visible Portion of Turbine

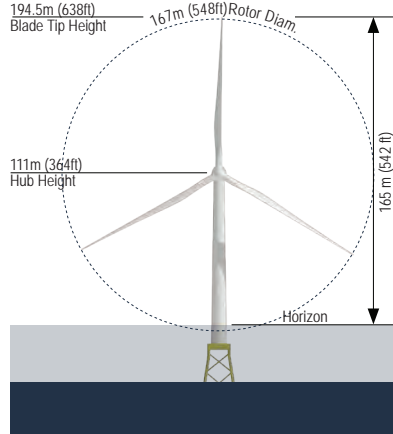


Figure 15b  
**Surfside Beach**  
 Town of Nantucket, Nantucket Island, MA

**SIMULATED VIEW**

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/13:12
Light Condition:	Back Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 14' 41.751"N
Longitude:	70° 04' 41.337"W
Elevation(±):	6.1 m (20 ft)
Nearest Turbine:	29.8 km (18.5 mi)

### Visual Setting

Resource Type:	Recreation, Historic Resources
Landscape Unit:	Ocean Beach, Coastal Dunes, Salt Pond/Tidal Marsh
Viewer Groups	Residents, Vacationers, Recreational
Circumstances of View:	Stationary

Figure 16a  
**Nobadeer Beach**  
 Town of Nantucket, Nantucket Island, MA

### EXISTING VIEW

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.

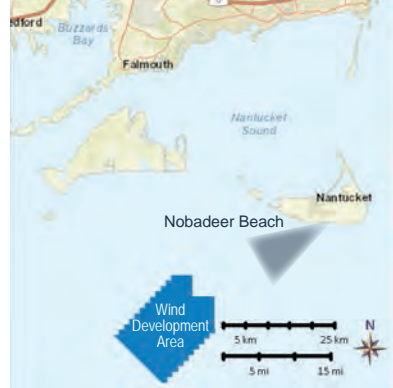




# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/13:12
Light Condition:	Back Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 14' 41.751"N
Longitude:	70° 04' 41.337"W
Elevation(±):	6.1 m (20 ft)
Nearest Turbine:	29.8 km (18.5 mi)

### Visible Portion of Turbine

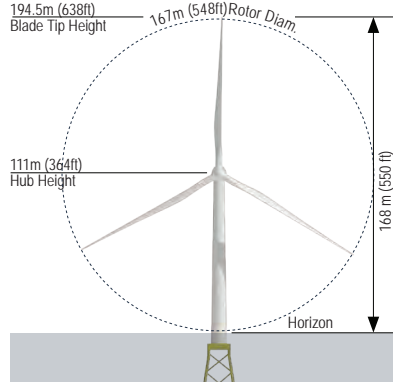


Figure 16b  
**Nobadeer Beach**  
 Town of Nantucket, Nantucket Island, MA

**SIMULATED VIEW**

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

Photographic  
Simulations

## Photo Location Map



## Camera Data

Date / Time: 20-Oct-2017/14:45  
 Light Condition: Back Light  
 Camera: Canon 5d Mark IV  
 Focal Length: 50mm (full frame)

## Camera Location

Latitude: 41° 14' 23.522"N  
 Longitude: 70° 00' 33.675"W  
 Elevation(±): 16.8 m (55 ft)  
 Nearest Turbine: 34.5 km (21.4 mi)

## Visual Setting

Resource Type: Recreation  
 Landscape Unit: Maintained Recreation, Coastal Bluffs, Coastal Scrub  
 Viewer Groups: Residents, Vacationers, Recreational  
 Circumstances of View: Stationary

Figure 17a  
**Tom Nevers Field**  
 Town of Nantucket, Nantucket Island, MA

**EXISTING VIEW**

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/14:45
Light Condition:	Back Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 14' 23.522"N
Longitude:	70° 00' 33.675"W
Elevation(±):	16.8 m (55 ft)
Nearest Turbine:	34.5 km (21.4 mi)

### Visible Portion of Turbine

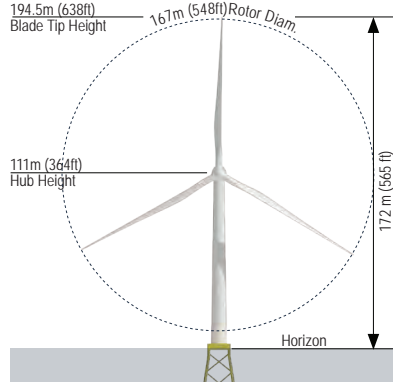


Figure 17b  
**Tom Nevers Field**  
 Town of Nantucket, Nantucket Island, MA

**SIMULATED VIEW**

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time: 20-Oct-2017/16:43  
 Light Condition: Back Light  
 Camera: Canon 5d Mark IV  
 Focal Length: 50mm (full frame)

### Camera Location

Latitude: 41° 23' 22.403"N  
 Longitude: 70° 03' 02.137"W  
 Elevation(±): 2.7 m (9 ft)  
 Nearest Turbine: 42.4 km (26.3 mi)

### Visual Setting

Resource Type: NRHP, Recreation  
 Landscape Unit: Maintained Recreation, Coastal Bluffs, Coastal Scrub  
 Viewer Groups: Tourists, Vacationers, Recreational  
 Circumstances of View: Stationary

Figure 18a  
**Great Point Lighthouse**  
 Town of Nantucket, Nantucket Island, MA

**EXISTING VIEW**

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	20-Oct-2017/16:43
Light Condition:	Back Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41° 23' 22.403"N
Longitude:	70° 03' 02.137"W
Elevation(±):	2.7 m (9 ft)
Nearest Turbine:	42.4 km (26.3 mi)

### Visible Portion of Turbine

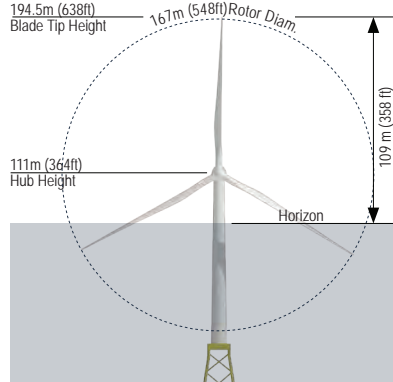


Figure 18b  
**Great Point Lighthouse**  
 Town of Nantucket, Nantucket Island, MA

**SIMULATED VIEW**

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





# VINEYARD WIND PROJECT

## Photographic Simulations

### Photo Location Map



### Camera Data

Date / Time	17-Oct-2017/15:08
Light Condition:	Side Light/Haze
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

### Camera Location

Latitude:	41°37'22.722"N
Longitude:	70°21'54.928"W
Elevation(±):	6.1 m (20 ft)
Nearest Turbine:	54.1 km (33.6 mi)

### Visible Portion of Turbine

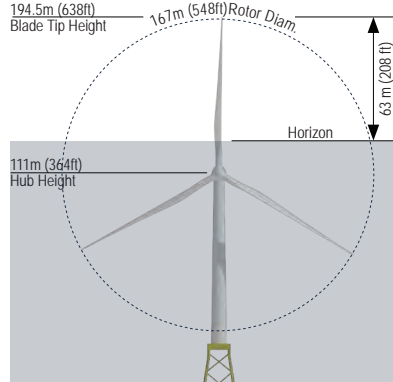


Figure 20c  
**Dowses Beach**  
 Town of Barnstable, Cape Cod, MA

### SIMULATED VIEW - MODERATE HAZE

This visualization incorporates a simulated haze condition that reduces visibility of the WTGs to approximately 50%.

The above photograph is intended to be viewed 20 inches from the reader's eye when printed on 11"x17" paper and 13 inches from the reader's eye when printed on 8 1/2" x 11" paper. Viewing on an uncalibrated video monitor can alter intended lightness, color and/or contrast of the image.





Figure 3a  
**Madaket Beach**  
 Town of Nantucket, Nantucket Island, MA

This photo simulation conservatively presents project visibility under clear weather conditions. Minimal atmospheric haze is applied to simulated elements to account for sea spray and sea salt typical of atmospheric conditions over the ocean.

Panoramic Image (124° x 55°) - This panoramic image approximates the full horizontal and vertical field-of-view of normal human eyesight.

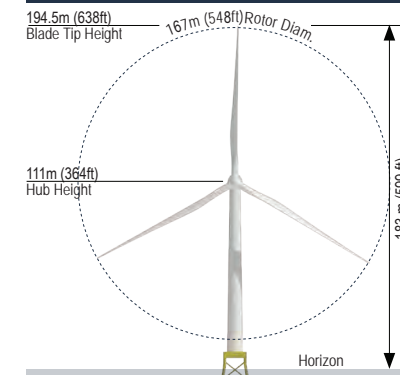
**Camera Data**

Date / Time	20-Oct-2017/7:50
Light Condition:	Side Light
Camera:	Canon 5d Mark IV
Focal Length:	50mm (full frame)

**Camera Location**

Latitude:	41° 16' 12.833"N
Longitude:	70° 12' 05.262"W
Elevation(±):	7.3 m (24 ft)
Nearest Turbine:	24.1 km (14.9 mi)

**Visible Portion of Turbine**



**VINEYARD  
 WIND PROJECT**  
 Photographic  
 Simulations

**SIMULATED VIEW - DAYTIME VIEW**  
 PANORAMIC IMAGE

OCS-A 0501 MASS USA  
**VINEYARD WIND**  
 SARATOGA ASSOCIATES