Appendix Q – Radar and Navigational Aid Screening Study


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Revision Summary

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Description of Revisions

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INTRODUCTION

The proposed Kitty Hawk Offshore Wind Project (Project) consists of 69 wind turbine generators and one electrical service platform located on approximately 19,441 hectares of ocean (Wind Development Area) within the northwestern section of Lease Area OCS-A 0508 (Lease Area) off the coast of North Carolina. The electrical service platform will utilize one of the total 70 proposed locations within the Wind Development Area. This report provides the results of a radar and navigational aid screening study conducted by Westslope Consulting, LLC (Westslope) for the 70 proposed locations, Wind Development Area, and the Lease Area using a blade-tip height of 1,042 feet (ft) (317.5 meters [m]) above mean sea level (MSL).

This study includes the following:

- An initial analysis using the Department of Defense (DoD) Preliminary Screening Tool (PST);
- Research into other radar sites and Very High Frequency Omnidirectional Range (VOR) navigational aid sites near the Project;
- An Air Route Surveillance Radar (ARSR) and Airport Surveillance Radar (ASR) line-of-sight (LOS) analysis;
- A VOR screening analysis;
- A Next Generation Radar (NEXRAD) weather radar screening analysis; and
- A coastal High Frequency (HF) radar LOS analysis.

ANALYSIS

DoD Preliminary Screening Tool

Westslope conducted an initial analysis for Long Range Radar (LRR) and NEXRAD using the DoD PST on the Federal Aviation Administration (FAA) Obstruction Evaluation/Airport Airspace Analysis website. This analysis provides a cursory indication of whether wind turbines may be within line-of-sight of one or more radar sites, and likely to affect radar performance.

The PST LRR analysis accounts for ARSR sites and ASR sites used for air defense by the DoD at the North American Aerospace Defense Command and for homeland security by the Customs and Border Protection Air and Marine Operations Center. Further, the PST NEXRAD analysis accounts for DoD, FAA, and National Oceanic and Atmospheric Administration (NOAA) Weather Surveillance Radar model-88 Doppler (WSR-88D) sites. The PST does not account for all DoD, Department of Homeland Security

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1 KTHN_layout_20210617.shp, KTHN_WDA_20210617.shp, and KittyHawk_LeaseArea.kmz.
3 For LRR, the PST uses a buffered line-of-sight analysis at a blade-tip height of 750 feet AGL.
4 For NEXRAD, the PST uses a blade-tip height of 160 meters AGL (525 feet AGL).
(DHS), or FAA ground-based radar sites, including Relocatable Over-the-Horizon Radar sites, tethered aerostat radar sites, or FAA Terminal Doppler Weather Radar sites.

The PST is helpful for identifying potential impacts to LRR and NEXRAD; however, the results are preliminary, as suggested by the title of the PST, and do not provide an official decision as to whether impacts are acceptable to operations.

Please note that the PST NEXRAD analysis does not account for blade-tip heights greater than 525 ft AGL (160 m), does not account for WSR-88D sites authorized to scan at elevation angles below 0.5 degrees, and does not reflect the impact zone scheme updated in 2018 by the NOAA WSR-88D Radar Operations Center (ROC). The updated scheme expands the red area, or “No Build Zone,” from three to four kilometers (km) and to areas where wind turbine generators penetrate the third elevation angle scanned by a WSR-88D.

Based on the Lease Area, which contains the Wind Development Area, Westslope created a single point and a four-point polygon that are required for PST analysis purposes. The single point is the center of the polygon.

The PST single point and the polygon analysis results for LRR show that the Project falls within a green area. A green area indicates no anticipated impacts to air defense and homeland security radar. Please note that blue and grey areas also represent green areas in the PST LRR analysis results. See Figure 1, where the black rotor represents the single point, the thin black line represents the polygon, the black dots represent the 70 proposed locations, the red line represents the Wind Development Area, and the thick black line represents the Lease Area.

Westslope identified the closest four radar sites in the PST LRR results as the Binns Hall Common Air Route Surveillance Radar (CARSR), Naval Air Station (NAS) Oceana Airport Surveillance Radar model-11 (ASR-11), Norfolk Airport Surveillance Radar model-9 (ASR-9), and the Oceana Air Route Surveillance Radar model-4 (ARSR-4). In addition to the DoD and DHS using these radar sites for air defense and homeland security, the DoD uses the NAS Oceana ASR-11 for air traffic control at the NAS Oceana Radar Air Traffic Control Facility. The FAA uses the Binns Hall CARSR, Norfolk ASR-9, and the Oceana ARSR-4 for air traffic control at multiple facilities, including the Washington Air Route Traffic Control Center and the Norfolk Terminal Radar Approach Control.

For NEXRAD, the PST analysis results for the single point and the polygon show that the Project falls within a green area. A green area, or “No Impact Zone,” indicates that impacts are not likely to WSR-88D operations. Please note that blue and grey areas also represent green areas in the PST NEXRAD analysis results. See Figure 2. Westslope identified the closest three radar sites in the PST NEXRAD analysis as the Dover Air Force Base (AFB) WSR-88D, Morehead City WSR-88D, and the Norfolk WSR-88D.
Research conducted by Westslope shows that the lowest elevation angle scanned by the Dover AFB WSR-88D, Morehead City WSR-88D, and the Norfolk WSR-88D is 0.5 degrees.

Figure 1 Long Range Radar Results for the Single Point (left) and for the Polygon (right)

Figure 2 NEXRAD Results for the Single Point (left) and for the Polygon (right)
Other ARSR and ASR Sites

Research conducted by Westslope identified no additional ARSR or ASR sites near the Project.

Co-located Secondary Surveillance Radar

Research conducted by Westslope identified the following secondary surveillance radar systems co-located with the ARSR and ASR systems:

- An Air Traffic Control Beacon Interrogator model-6 is co-located with the Binns Hall CARSR and the Oceana ARSR-4;
- A Mode S is co-located with the Norfolk ASR-9; and
- A Monopulse Secondary Surveillance Radar is co-located with the NAS Oceana ASR-11.

Secondary surveillance radar are the mainstay for air traffic and are used in combination with primary surveillance radar. In general, secondary surveillance radar systems are less susceptible to interference from wind turbines than primary surveillance radar systems, such as the ARSR and ASR systems.

VOR Sites

Research conducted by Westslope identified one navigational aid site near the Project: the Wright Brothers VOR and co-located Distance Measuring Equipment (VOR/DME).

Correspondence with the FAA indicates that this VOR is a conventional VOR. In general, conventional VORs are more susceptible than Doppler VORs to interference from wind turbines.

HF Radar Sites

Research conducted by Westslope identified the following six HF radar sites near the Project:

- Assateague Island HF radar;
- Cape Hatteras HF radar;
- Cedar Island HF radar;
- Core Banks HF radar;
- Duck HF radar; and
- Little Island Park HF radar.

The Assateague Island HF radar, Cedar Island HF radar, and the Little Island Park HF radar are operated by Old Dominion University, and the Cape Hatteras HF radar, Core Banks HF radar, and the Duck HF radar are operated by the University of North Carolina. Various federal agencies in partnership with NOAA’s Integrated Ocean Observing System (IOOS) use the ocean surface current and wave data provided by these HF radar sites in support of multiple missions.
ARSR and ASR LOS Analysis

Westslope conducted an ARSR and ASR LOS analysis using the United States Geological Survey (USGS) 10-meter National Elevation Dataset (NED). This analysis shows whether wind turbines at a blade-tip height of 1,042 ft (317.5 m) MSL will be within line-of-sight of one or more ARSR and ASR sites.

Westslope conducted the LOS analysis for the following four ARSR and ASR sites:

- Binns Hall CARSR;
- NAS Oceana ASR-11;
- Norfolk ASR-9; and
- Oceana ARSR-4.

Binns Hall CARSR

The LOS analysis results show that the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with the Binns Hall CARSR at a blade-tip height of 1,042 ft (317.5 m) MSL. As a result, Westslope does not expect any radar effects at or below this blade-tip height.

NAS Oceana ASR-11

The LOS analysis results show that 63 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with the NAS Oceana ASR-11 at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 3.

Westslope also conducted a LOS analysis using the 10-meter NED and a Digital Surface Model (DSM) created using Light Detection and Ranging (LiDAR) data for the southeastern Virginia and northeastern North Carolina area. The DSM captures topographical features, such as buildings, which are not generally accounted for in the bare earth NED data.

The LOS analysis results using the 10-meter NED and the DSM data show that 30 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 4.

The radar effects will include unwanted radar returns (clutter) resulting in a partial loss of primary target detection and a number of false primary targets over and in the immediate vicinity of the proposed locations within line-of-sight in the Project. Other radar effects include a partial loss of weather detection and false weather indications over and in the immediate vicinity of the proposed locations within line-of-sight in the Project.
Norfolk ASR-9

The LOS analysis results show that eight of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with the Norfolk ASR-9 at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 5.

Westslope also conducted a LOS analysis using the 10-meter NED and the DSM data, which shows that the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 6.

Without using the DSM, the radar effects will include clutter resulting in a partial loss of primary target detection and a number of false primary targets over and in the immediate vicinity of the proposed locations within line-of-sight in the Project. Other radar effects include a partial loss of weather detection and false weather indications over and in the immediate vicinity of the proposed locations within line-of-sight in the Project.

Oceana ARSR-4

The LOS analysis results show that 69 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with the Oceana ARSR-4 at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 7.

Westslope also conducted a LOS analysis using the 10-meter NED and the DSM data, which yields similar results as above showing that 69 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 8.

The radar effects will include clutter resulting in a partial loss of primary target detection and a number of false primary targets over and in the immediate vicinity of the proposed locations within line-of-sight in the Project.
Figure 3 LOS Analysis Results for the NAS Oceana ASR-11 using 10-meter NED
Figure 4 LOS Analysis Results for the NAS Oceana ASR-11 using 10-meter NED and the DSM
Figure 5 LOS Analysis Results for the Norfolk ASR-9 using 10-meter NED
Figure 6 LOS Analysis Results for the Norfolk ASR-9 using 10-meter NED and the DSM
Figure 7 LOS Analysis Results for the Oceana ARSR-4 using 10-meter NED
Figure 8 LOS Analysis Results for the Oceana ARSR-4 using 10-meter NED and the DSM
VOR Screening Analysis

Westslope conducted a VOR screening analysis using USGS 10-meter NED. This analysis shows whether the Project (1) is less than or equal to 8 nautical miles (NM) (14.8 km) from a VOR site; (2) will subtend elevation angles greater than 0.60 degrees from the base elevation of a conventional VOR at a blade-tip height of 1,042 ft (317.5 m) MSL, or 0.75 degrees for a Doppler VOR; and (3) will fall within line-of-sight of a VOR site. This screening analysis provides a cursory indication of whether the Project may affect VOR performance and is similar to the FAA’s analysis approach for VOR sites. The same criteria will also protect for DMEs.

Westslope conducted a VOR screening analysis for the Wright Brothers VOR/DME. The results show that the Project is greater than 8 nm (14.8 km) from this VOR site. As such, no additional analysis was considered necessary for this navigational aid site.
**NEXRAD Weather Radar Screening Analysis**

The PST NEXRAD analysis does not account for blade-tip heights greater than 525 ft (160 m) AGL, does not account for WSR-88D sites authorized to scan at elevation angles below 0.5 degrees, and does not reflect the wind farm impact zone scheme updated in 2018 by the NOAA WSR-88D ROC. The updated scheme expands the red area, or "No Build Zone," from three to four kilometers and to areas where wind turbines penetrate the third elevation angle scanned by a WSR-88D.

Westslope conducted a NEXRAD weather radar screening analysis using USGS 10-meter NED. This analysis shows whether wind turbines at a blade-tip height of 1,042 ft (317.5 m) MSL will be within line-of-sight of one or more WSR-88D sites and incorporates the updated wind farm impact zone scheme.

Westslope conducted the NEXRAD weather radar screening analysis for the following three radar sites:

- Dover AFB WSR-88D;
- Morehead City WSR-88D; and
- Norfolk WSR-88D.

Research conducted by Westslope shows that the lowest elevation angle scanned by the Dover AFB WSR-88D, Morehead City WSR-88D, and the Norfolk WSR-88D is 0.5 degrees.

**Dover AFB WSR-88D**

Westslope’s NEXRAD weather radar screening analysis shows that the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with the Dover AFB WSR-88D at a blade-tip height of 1,042 ft (317.5 m) MSL. The results also show that the 70 proposed locations in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL will fall within a NOAA green area for this radar site. A green area, or "No Impact Zone," indicates that impacts are not likely to WSR-88D operations. See Figure 9.

**Morehead City WSR-88D**

Westslope’s NEXRAD weather radar screening analysis shows that the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with the Morehead City WSR-88D at a blade-tip height of 1,042 ft (317.5 m) MSL. The results also show that the 70 proposed locations in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL will fall within a NOAA green No Impact Zone for this radar site. See Figure 10.
Norfolk WSR-88D

Westslope’s NEXRAD weather radar screening analysis shows that the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with the Norfolk WSR-88D at a blade-tip height of 1,042 ft (317.5 m) MSL. The results also show that the 70 proposed locations in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL will fall within a NOAA green No Impact Zone for this radar site. See Figure 11.
Figure 9: WSR-88D ROC Zone Results at 1,042 ft (317.5 m) MSL for the Dover AFB WSR-88D using 10-meter NED
Figure 10 WSR-88D ROC Zone Results at 1,042 ft (317.5 m) MSL for the Morehead City WSR-88D using 10-meter NED
Figure 11 WSR-88D ROC Zone Results at 1,042 ft (317.5 m) MSL for the Norfolk WSR-88D using 10-meter NED
HF Radar LOS Analysis

Westslope conducted an HF radar LOS analysis using USGS 10-meter NED. This analysis shows whether wind turbines at a blade-tip height of 1,042 ft (317.5 m) MSL will be within line-of-sight of one or more HF radar sites.

Westslope conducted the LOS analysis for the following six HF radar sites:

- Assateague Island HF radar;
- Cape Hatteras HF radar;
- Cedar Island HF radar;
- Core Banks HF radar;
- Duck HF radar; and
- Little Island Park HF radar.

Assateague Island HF Radar

The LOS analysis results show that the 70 proposed locations in the Project will not be within line-of-sight of the Assateague Island HF radar at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 12. Although the proposed locations in the Project will not be within line-of-sight of this radar site, radar effects are still possible beyond line-of-sight due to the propagation of HF electromagnetic waves over the ocean surface.

Cape Hatteras HF Radar

The LOS analysis results show that the 70 proposed locations in the Project will not be within line-of-sight of the Cape Hatteras HF radar at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 13. Although the proposed locations in the Project will not be within line-of-sight of this radar site, radar effects are still possible beyond line-of-sight due to the propagation of HF electromagnetic waves over the ocean surface.

Cedar Island HF Radar

The LOS analysis results show that the 70 proposed locations in the Project will not be within line-of-sight of the Cedar Island HF radar at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 14. Although the proposed locations in the Project will not be within line-of-sight of this radar site, radar effects are still possible beyond line-of-sight due to the propagation of HF electromagnetic waves over the ocean surface.
Core Banks HF Radar

The LOS analysis results show that the 70 proposed locations in the Project are beyond the instrumented range of the Core Banks HF radar and will not be within line-of-sight of this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 15. As a result, Westslope does not expect any radar effects at or below this blade-tip height.

Duck HF Radar

The LOS analysis results show that all 70 proposed locations in the Project will be within line-of-sight of the Duck HF radar at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 16. The radar effects will include clutter in the vicinity of the proposed locations in the Project. As a result, impacts to Duck HF radar operations are possible.

Little Island Park HF Radar

The LOS analysis results show that all 70 proposed locations in the Project will be within line-of-sight of the Little Island Park HF radar at a blade-tip height of 1,042 ft (317.5 m) MSL. See Figure 17. The radar effects will include clutter in the vicinity of the proposed locations in the Project. As a result, impacts to Little Island Park HF radar operations are possible.
Figure 12 LOS Analysis Results for the Assateague Island HF Radar using 10-meter NED
Figure 13 LOS Analysis Results for the Cape Hatteras HF Radar using 10-meter NED
Figure 14 LOS Analysis Results for the Cedar Island HF Radar using 10-meter NED
Figure 15 LOS Analysis Results for the Core Banks HF Radar using 10-meter NED
Figure 16 LOS Analysis Results for the Duck HF Radar using 10-meter NED
Figure 17 LOS Analysis Results for the Little Island Park HF Radar using 10-meter NED
CONCLUSIONS

The DoD PST analysis results for the Project indicate the following:

- Impacts to air defense and homeland security radar are not anticipated; and
- Impacts to WSR-88D weather radar are not likely.

Westslope identified the closest four radar sites in the PST analysis results for Long Range Radar as the Binns Hall CARSR, NAS Oceana ASR-11, Norfolk ASR-9, and the Oceana ARSR-4. Further, Westslope identified the closest three radar sites in the PST analysis results for NEXRAD as the Dover AFB WSR-88D, Morehead City WSR-88D, and the Norfolk WSR-88D.

Research conducted by Westslope identified no additional ARSR or ASR sites near the Project.

Westslope conducted an ARSR and ASR LOS analysis for the following four ARSR and ASR sites:

- Binns Hall CARSR;
- NAS Oceana ASR-11;
- Norfolk ASR-9; and
- Oceana ARSR-4.

The ARSR and ASR LOS analyses conducted by Westslope show the following:

- For the NAS Oceana ASR-11, 63 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. The LOS analysis results using the 10-meter NED and the DSM data show that 30 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL.
- For the Norfolk ASR-9, eight of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. The LOS analysis results using the 10-meter NED and the DSM data show that the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL.
- For the Oceana ARSR-4, 69 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. The LOS analysis results using the 10-meter NED and the DSM data yield similar results as above showing that 69 of the 70 proposed locations in the Project will be within line-of-sight of and may interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL.
- For the Binns Hall CARSR, the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL.
For the NAS Oceana ASR-11, without mitigation, the radar effects due to clutter will include a partial loss of primary target detection and a number of false primary targets over and in the immediate vicinity of the proposed locations within line-of-sight in the Project. Other radar effects include a partial loss of weather detection and false weather indications over and in the immediate vicinity of the proposed locations within line-of-sight in the Project. Please note that radar effects do not always translate into operational impacts.

For the Norfolk ASR-9, without using the DSM and without mitigation, the radar effects due to clutter will include a partial loss of primary target detection and a number of false primary targets over and in the immediate vicinity of the proposed locations within line-of-sight in the Project. Other radar effects include a partial loss of weather detection and false weather indications over and in the immediate vicinity of the proposed locations within line-of-sight in the Project.

For the Oceana ARSR-4, without mitigation, the radar effects due to clutter will include a partial loss of primary target detection and a number of false primary targets over and in the immediate vicinity of the proposed locations within line-of-sight in the Project.

Because wind turbines will be within line-of-sight of the NAS Oceana ASR-11, Norfolk ASR-9, and the Oceana ARSR-4, Westslope expects that the DoD and FAA will have concerns with the proposed locations within line-of-sight in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL based on electromagnetic interference to air navigation facilities. The FAA’s aeronautical study process and the DoD Siting Clearinghouse process will provide an official decision as to whether impacts are acceptable to operations. Although possible, Westslope does not expect that the DHS will have concerns with the proposed locations within line-of-sight in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL based on impacts to these radar sites.

As the Project advances, Avangrid Renewables, LLC is committed to working with the appropriate stakeholders to develop a monitoring and mitigation plan.

Westslope does not expect that the Project will affect the secondary surveillance radar co-located with the NAS Oceana ASR-11, Norfolk ASR-9, or the Oceana ARSR-4.

Westslope’s VOR screening analysis for the Wright Brothers VOR/DME shows that the Project is greater than 8 nm (14.8 km) from this navigational aid site. Although possible, Westslope does not expect that the FAA will have concerns with the proposed locations in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL based on impacts to this navigational aid site.

Westslope conducted a NEXRAD weather radar screening analysis for the following three radar sites:

- Dover AFB WSR-88D;
- Morehead City WSR-88D; and
- Norfolk WSR-88D.
Westslope’s NEXRAD weather radar screening analysis for the Dover AFB WSR-88D, Morehead City WSR-88D, and the Norfolk WSR-88D shows that the 70 proposed locations in the Project will not be within line-of-sight of and will not interfere with these radar sites at a blade-tip height of 1,042 ft (317.5 m) MSL. The results also show that the 70 proposed locations in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL will fall within a NOAA green No Impact Zone for these radar sites.

Westslope conducted an HF radar LOS analysis for the following six radar sites:

- Assateague Island HF radar;
- Cape Hatteras HF radar;
- Cedar Island HF radar;
- Core Banks HF radar;
- Duck HF radar; and
- Little Island Park HF radar.

The HF radar LOS analyses conducted by Westslope show the following:

- For the Duck HF radar and the Little Island Park HF radar, all 70 proposed locations in the Project will be within line-of-sight of these radar sites at a blade-tip height of 1,042 ft (317.5 m) MSL.
- For the Assateague Island HF radar, Cape Hatteras HF radar, and the Cedar Island HF radar, the 70 proposed locations in the Project will not be within line-of-sight of these radar sites at a blade-tip height of 1,042 ft (317.5 m) MSL. Although the proposed locations in the Project will not be within line-of-sight of these radar sites, radar effects are still possible beyond line-of-sight due to the propagation of HF electromagnetic waves over the ocean surface.
- For the Core Banks HF radar, the 70 proposed locations in the Project are beyond the instrumented range of this radar site and will not be within line-of-sight of this radar site at a blade-tip height of 1,042 ft (317.5 m) MSL. As a result, Westslope does not expect any radar effects at or below this blade-tip height.

For the Duck HF radar and the Little Island Park HF radar, without mitigation, the radar effects will include clutter in the vicinity of the proposed locations in the Project. Because wind turbines will be within line-of-sight of these radar sites, Westslope expects that multiple federal agencies in partnership with NOAA’s IOOS may have concerns with the proposed locations in the Project at a blade-tip height of 1,042 ft (317.5 m) MSL based on potential interference to these HF radar sites.

As the Project advances, Avangrid Renewables, LLC is committed to working with the appropriate stakeholders to develop a monitoring and mitigation plan.
Westslope recommends that the Project be submitted to the DoD Siting Clearinghouse for an informal review and to the National Telecommunications Information Administration (NTIA) for a detailed review. The NTIA is essentially a clearinghouse for other federal agencies, including the National Oceanic and Atmospheric Administration. Additionally, Westslope recommends consultation with NOAA’s IOOS Program Office.

All the above steps have been taken by Avangrid Renewables, LLC.

If you have any questions regarding this analysis, please contact Geoff Blackman at (405) 816-2604 or via email at gnblackman@westslopeconsulting.com.