

# Solar Power GeoPlanner™

## Government RADAR Systems Analysis

Mohawk Solar Farm



Prepared on Behalf of  
Avangrid Renewables

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## 1. Introduction

Comsearch was contracted by Avangrid Renewables to determine if there would be any significant degradation to the operational coverage of Government RADAR systems located near the proposed Mohawk Solar Energy Project in Montgomery County, New York. Figure 1 shows the location of the Mohawk Solar Energy project area.



**Figure 1: Mohawk Solar Energy Project Area**



## 2. Summary of Screening Results

There are three types of radar systems that Comsearch examined as part of this analysis: Department of Defense (DoD) military systems, Federal Aviation Administration (FAA) long range radar systems, and National Weather Service (NWS) NEXRAD WSR-88D systems.

Comsearch used the DoD RADAR screening tool to determine whether potential coverage issues were anticipated for the above systems. The geographical coordinates for the center point of the Mohawk Solar Energy project area (42°56'07"N, 74°37'54"W) were used as an input parameter for the screening tool. The results of the screening showed that there were no potential issues with the Department of Defense (DoD) military operations nor with the National Weather Service (NWS) NEXRAD WSR-88D systems. However, there is potential impact to the FAA long range radar. In support of these findings, three figures and statements were captured from the DoD screening tool and are presented below.

Figure 2 shows the screening results for the DoD military system which is basically a sectional aeronautical chart centered on the solar project area.



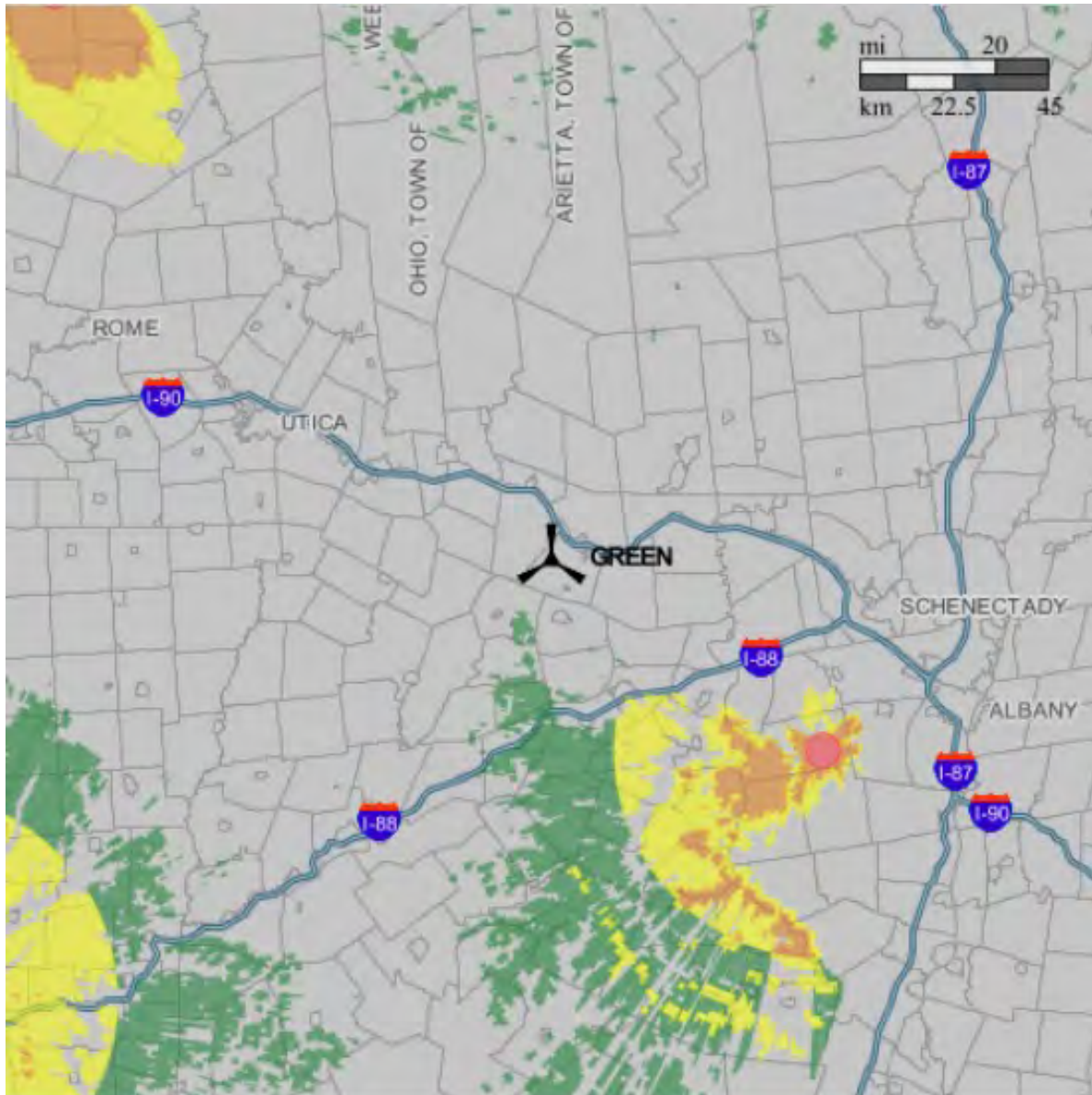
Figure 2: Screening Tool Diagram for DoD Military Systems



According to the DoD screening tool, there are no likely impacts to military airspace. However, it is recommended that the following coordinators be contacted for formal approval and confirmation:

- David Brentzel (404) 562-4211  
USAF Regional Environmental Coordinator
- US Navy Representative, FAA Eastern Service Area (404) 305-6908  
USN Regional Environmental Coordinator
- LTC Jeffrey Martuscelli (404) 305-6915  
USA Regional Environmental Coordinator
- US Marine Corps Representative, FAA Eastern Service Area (404) 305-6907  
USMC Regional Environmental Coordinator

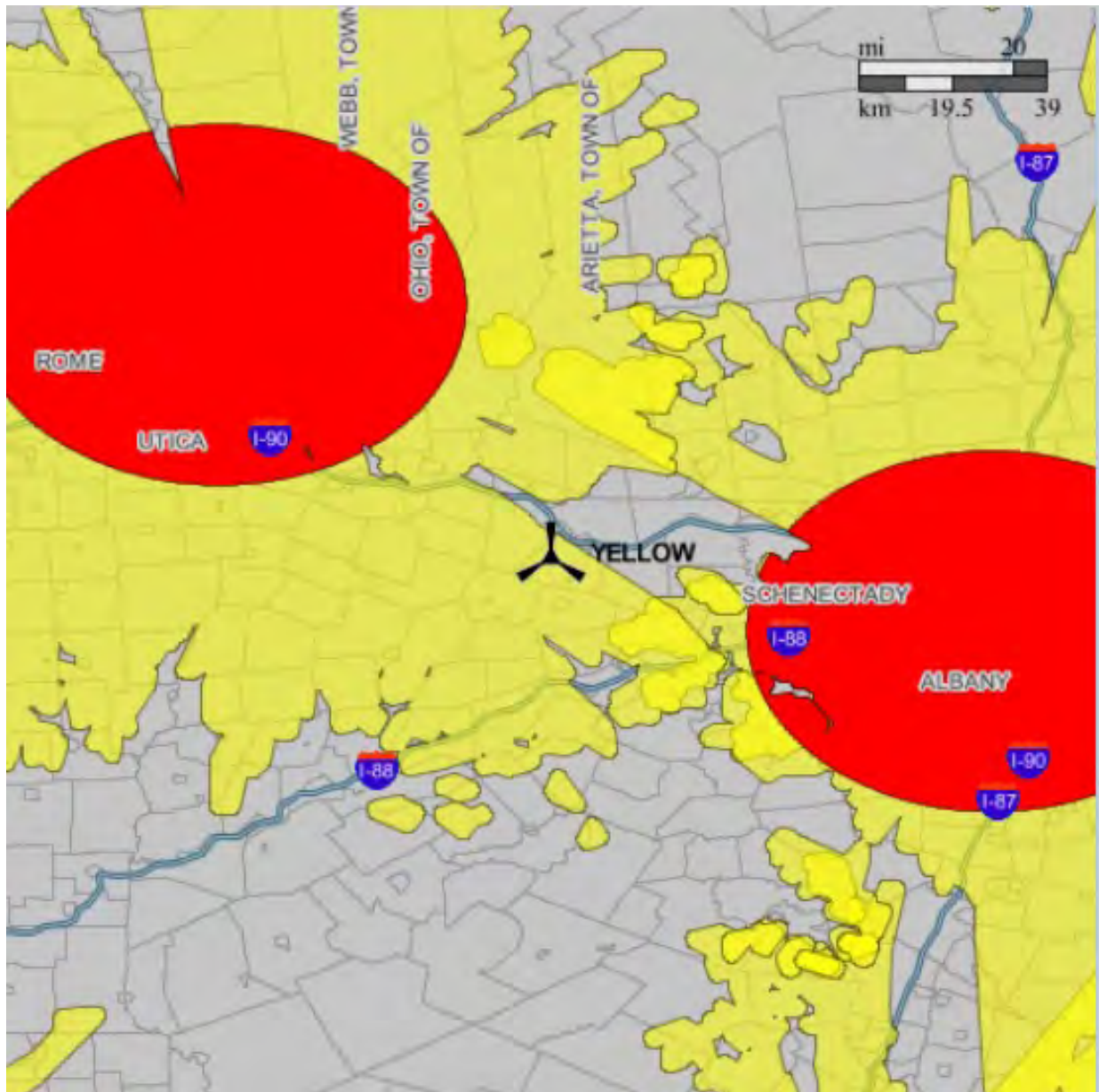
Figure 3 shows the screening results for the NEXRAD weather service systems. The screening tool map shows that the Mohawk Solar Energy project will be located in the “Green” area of the NEXRAD systems located around the project area. The “Green” designation signifies that no obstruction to the radar line-of-sight (RLOS) is predicted for the surrounding radar systems. However, it is recommended that NOAA is kept informed as the solar farm project develops so that corrupted radar data can be flagged. All information regarding the solar project can be sent directly to NOAA at [solar.energy.matters@noaa.gov](mailto:solar.energy.matters@noaa.gov).



**Figure 3: Screening Tool Diagram for Weather Service RADAR Coverage**



Figure 4 shows the screening results for the FAA long range radar system. According to the map diagram, there are two FAA radar systems in the surrounding area whose coverage could be impacted based on the geographical location of the project. This is depicted by the “Yellow” designation in the resulting diagram which indicates that an official Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) may be required by filing an FAA notice of the construction via Form 7460-1.



**Figure 4: Screening Tool Diagram for FAA Long Range Radar Coverage**

To determine if the project is required to file notice with the FAA, Comsearch used the Notice Criteria Tool provided by the FAA which factors in the 20-foot maximum height of the solar array panels in addition to the ground elevation at the specified location of the project. According to this tool, the proposed Mohawk Solar Farm would not exceed any height criteria. Furthermore,

it is not located near an airport or heliport and will not emit frequencies that could interfere with surrounding navigation radars. Therefore, Comsearch does not anticipate any harmful impact to any of the surrounding FAA long range radar system.

### **3. Conclusions**

Potential issues involving military operations in the same area as the Mohawk Solar Energy Project were examined. Based on the DoD screening tool, no issues were identified.

According to the same screening tool, no issues were identified with the Weather Service's NEXRAD Radar Systems. Therefore, NOAA will not need to perform a detailed analysis but still requests that the Weather Service be informed about the solar project. The Weather Service can be informed by sending information regarding the solar project directly to NOAA at [solar.energy.matters@noaa.gov](mailto:solar.energy.matters@noaa.gov).

Likewise, no impacts are anticipated to the FAA long range radar, as the project does not exceed the OE/AAA height criteria according to the FAA Notice Criteria Tool, will not emit frequencies, nor is it located near an airport or heliport.





## **4. Contact**

For questions or information regarding the Government RADAR System Analysis report, please contact:

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