An aerial photograph of a large-scale solar farm. The solar panels are arranged in neat, parallel rows across a vast, arid landscape. In the background, there are rolling hills and mountains under a clear sky. A power transmission tower is visible on the left side of the image. The overall scene depicts a significant investment in renewable energy infrastructure in a sunny, desert environment.

**DoD Southwest Wind & Solar Work Group
Joint Military Affairs Committee
September 18, 2008**

**DeEllen Brasher
DoD REC Officer
Navy Region
Southwest**



OUTLINE

- DoD Southwest Wind (& Solar) Work Group Update
- Statistics for the DoD SW WWG
- Red, Yellow, Green Nevada Map Update
- Tools
- Regional Planning Efforts
- Nevada Efforts



Wind Energy Impacts

- Low-level aviation testing & training
 - Special Use Airspace
 - Military Training Routes
 - Other
- Radar/EMI
- DoD/DHS Long Range Radars

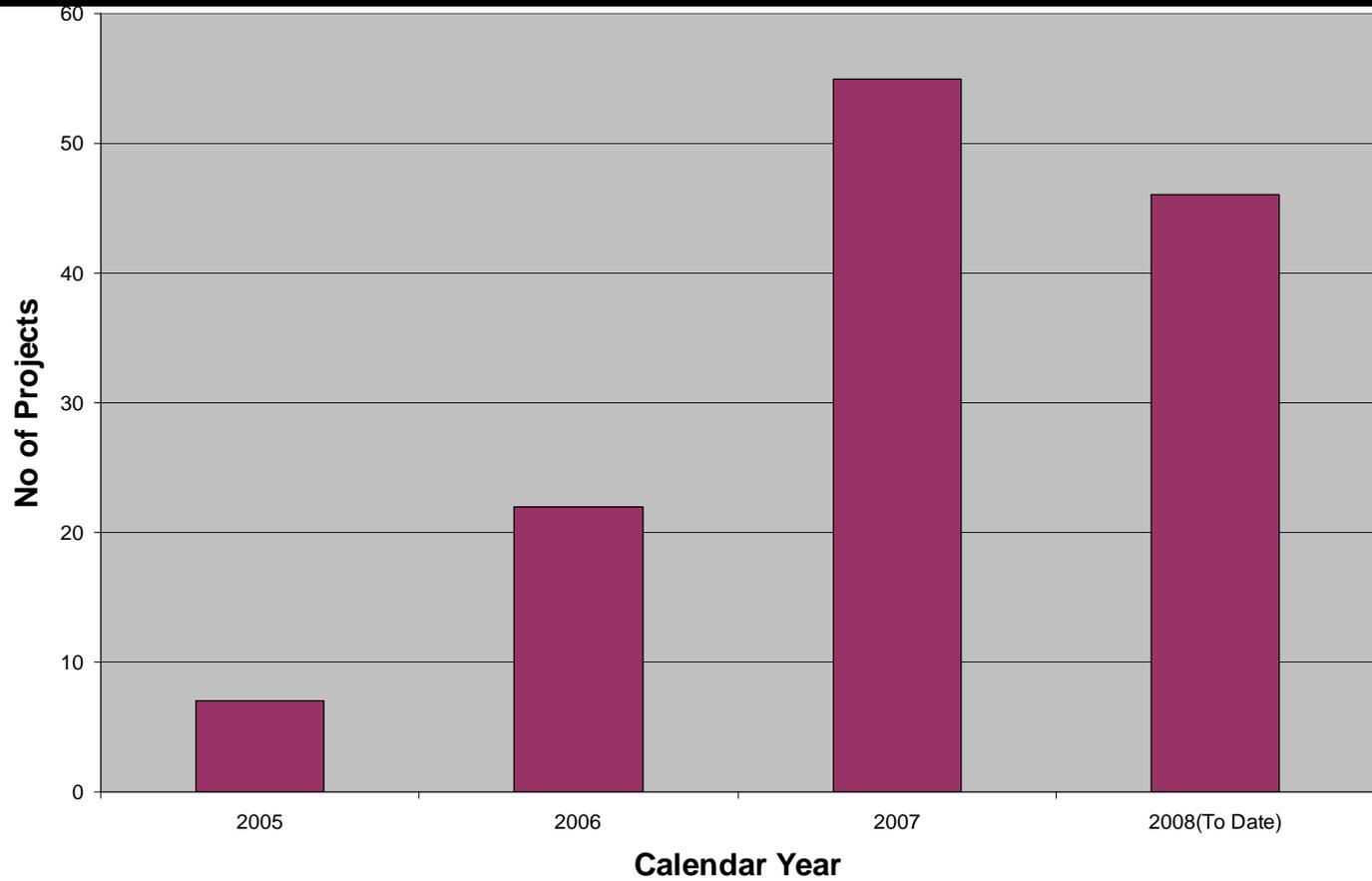


Solar Energy Impacts

- Height issues depending on technology
- Glare?
- Water consumption
- Significant land impacts
 - Habitat
 - Additional pressure on DoD lands
 - Limits expansion

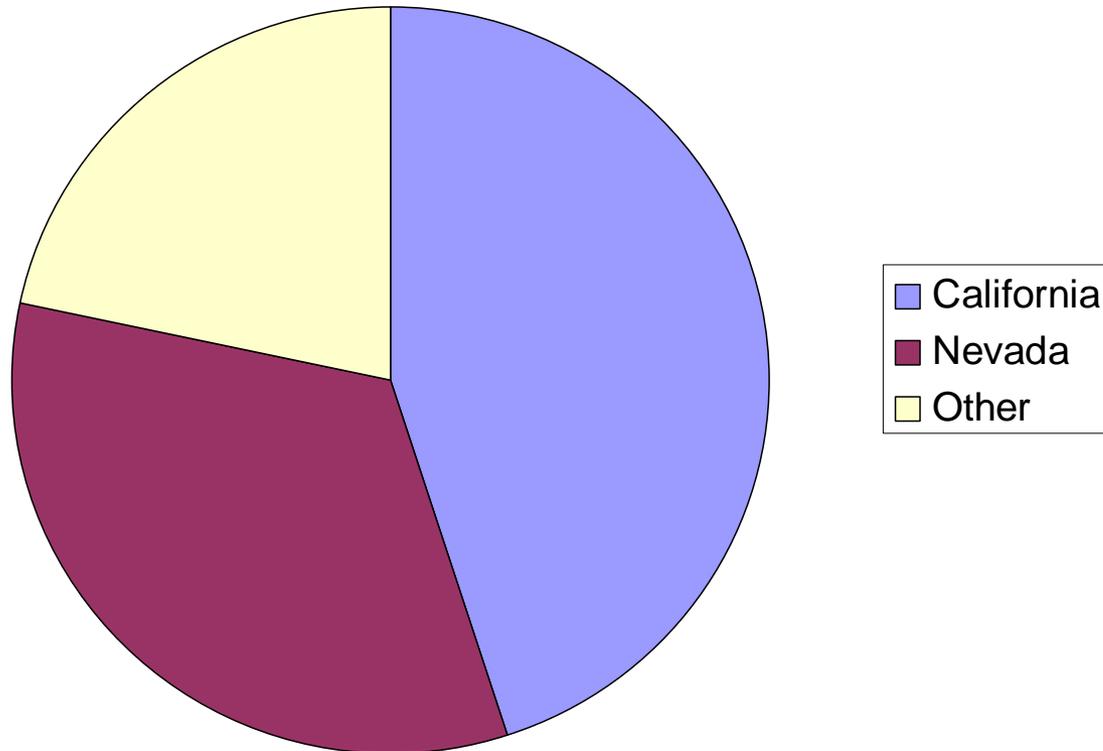


WWG Projects Received



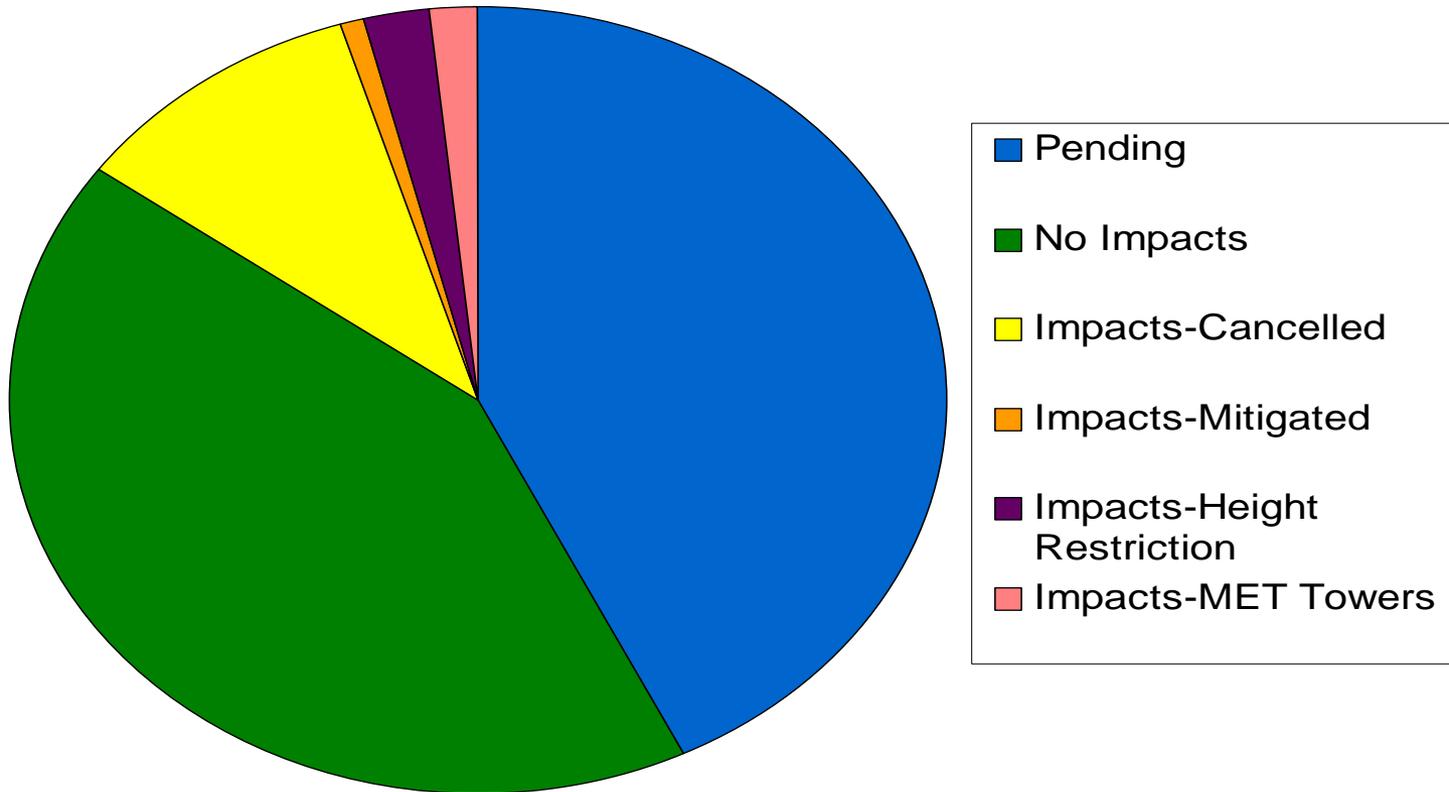


WWG Projects by State





WWG Outcomes





NEVADA

Red-Yellow-Green

Stoplight Strategy Tool

Items to be addressed on Nevada Map:

1. Request review of all BLM wind applications, not just those in the red/yellow areas
2. Correct some of the markings in low level operating areas
3. Address helicopter landing zones/operating areas.
4. Include explanation of terms and colors to minimize confusion that could lead to incompatible development





LRR Website



Federal Aviation Administration

Bringing Safety to America's Skies

Obstruction Evaluation

Home

FAA OE/AAA Offices

View Determined Cases (Form 7460-1)

View Proposed Cases (Form 7460-1)

View Supplemental Notices (Form 7460-2)

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Circle Search for Airports

Discretionary Review FAQs

No Notice Required Tool

Long Range Radar Tool

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New User Registration

Information Resources

FAA Acronyms

Forms

Regulatory Policy

Relevant Advisory

Long Range Radar Tool

faa.gov Tools: [Print this page](#)

Disclaimer:

- For initial evaluation of the potential impacts of obstructions on Air Defense and Homeland Security radars only. This evaluation does not indicate potential impacts on other radars. This is only a prescreening tool, intended to assist proponents in their initial siting process.

Instructions:

- Enter either a single point or a polygon and click submit to generate a long range radar analysis map.
- At least three points are required for a polygon, with an optional forth point.
- The largest polygon allowed has a maximum perimeter of 100 miles.

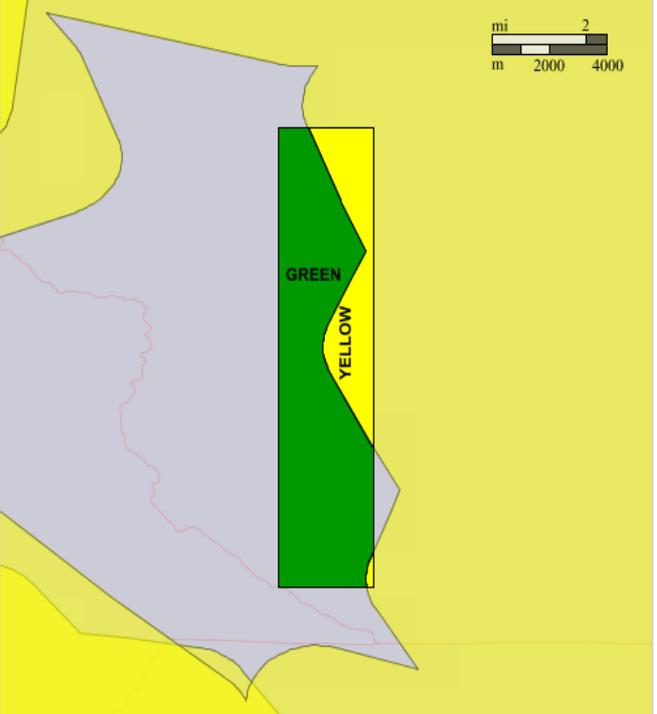
Analysis Type:

Point	Latitude				Longitude			
	Deg	Min	Sec	Dir	Deg	Min	Sec	Dir
1	<input type="text" value="39"/>	<input type="text" value="4"/>	<input type="text" value="4"/>	<input type="text" value="N"/>	<input type="text" value="122"/>	<input type="text" value="22"/>	<input type="text" value="12"/>	<input type="text" value="W"/>
2	<input type="text" value="39"/>	<input type="text" value="4"/>	<input type="text" value="4"/>	<input type="text" value="N"/>	<input type="text" value="122"/>	<input type="text" value="20"/>	<input type="text" value="27"/>	<input type="text" value="W"/>
3	<input type="text" value="38"/>	<input type="text" value="56"/>	<input type="text" value="22"/>	<input type="text" value="N"/>	<input type="text" value="122"/>	<input type="text" value="22"/>	<input type="text" value="12"/>	<input type="text" value="W"/>
4	<input type="text" value="38"/>	<input type="text" value="56"/>	<input type="text" value="22"/>	<input type="text" value="N"/>	<input type="text" value="122"/>	<input type="text" value="20"/>	<input type="text" value="27"/>	<input type="text" value="W"/>

Datum:

Map Legend:

- Green:** No anticipated impact to Air Defense and Homeland Security radars. Aeronautical study required.
- Yellow:** Impact likely to Air Defense and Homeland Security radars. Aeronautical study required.
- Red:** Impact highly likely to Air Defense and Homeland Security radars. Aeronautical study required.



Done

Internet



Proposed Web Based Tool

Notice Criteria Tool - Windows Internet Explorer

https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm

File Edit View Favorites Tools Help

Notice Criteria Tool

Federal Aviation Administration
Bringing Safety to America's Skies

Obstruction Evaluation **Notice Criteria Tool** faa.gov Tools: [Print this page](#)

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Information Resources

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.13](#).

You must file with the FAA at least 30 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your structure will be on an airport or heliport

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#).

The tool below will assist in applying the appropriate slope calculations per part 77.13(a)(2)(i) through (iii)

Latitude: Deg M S

Longitude: Deg M S

Datum:

Site Elevation (SE): (nearest foot)

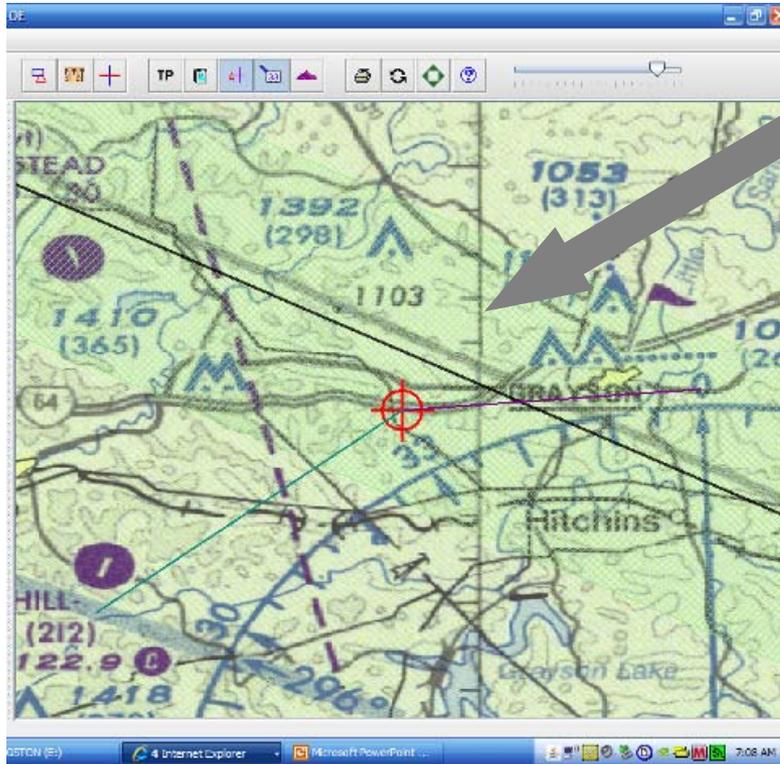
Structure Height (AGL): (nearest foot)

Internet 100%

start KINGSTON (E:) 4 Internet Explorer Microsoft PowerPoint ... 7:13 AM



What the Developer Gets Back



The sectional map is displayed with the MTR/SUA depicted and the outline of the route with the structure plotted

“Your proposal underlies VR123 and has the potential to impact AF operations. For a more detailed review, please provide this information to the Local AFB Airspace Manager at 703-555-1212.

Your proposal is unlikely to impact military operations. The Regional Coordinator at 703-555-1212 is available to confirm and provided supporting documentation



DoD & BLM WIND ENERGY MOU

- **PURPOSE:** Improve communication and coordination for proposed wind energy applications on BLM-administered lands
- **GOAL:** Promote wind energy development on BLM-administered public lands in manner compatible with military activities

WIND ENERGY PROTOCOL
BETWEEN
THE DEPARTMENT OF DEFENSE
AND
THE BUREAU OF LAND MANAGEMENT
CONCERNING CONSULTATION ON DEVELOPMENT
OF
WIND ENERGY PROJECTS AND TURBINE SITING ON PUBLIC LANDS
ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT
TO
ENSURE COMPATIBILITY WITH MILITARY ACTIVITIES

July 2008

I. PURPOSE

With the signing of the Wind Energy Protocol (Protocol), the Department of Defense (DOD) and the Department of the Interior, Bureau of Land Management (BLM), hereinafter referred to as the "Agencies," commit to work together to facilitate compatible land use through cooperative planning of wind energy projects on BLM-administered lands. Public lands withdrawn for military uses are outside the scope of the Protocol. Specific statutory and regulatory processes govern any request to use withdrawn lands for purposes other than military purposes. The purpose of the Protocol is to improve the communication and coordination process between BLM and DOD in the review of proposed wind energy right-of-way (ROW) applications on BLM-administered public lands. The Protocol will facilitate the timely processing of wind energy right-of-way applications and provide for the appropriate use of public lands for the development of wind energy resources. The ultimate goal of the Protocol is to promote long term wind energy development on BLM-administered public lands in a manner compatible with military activities.

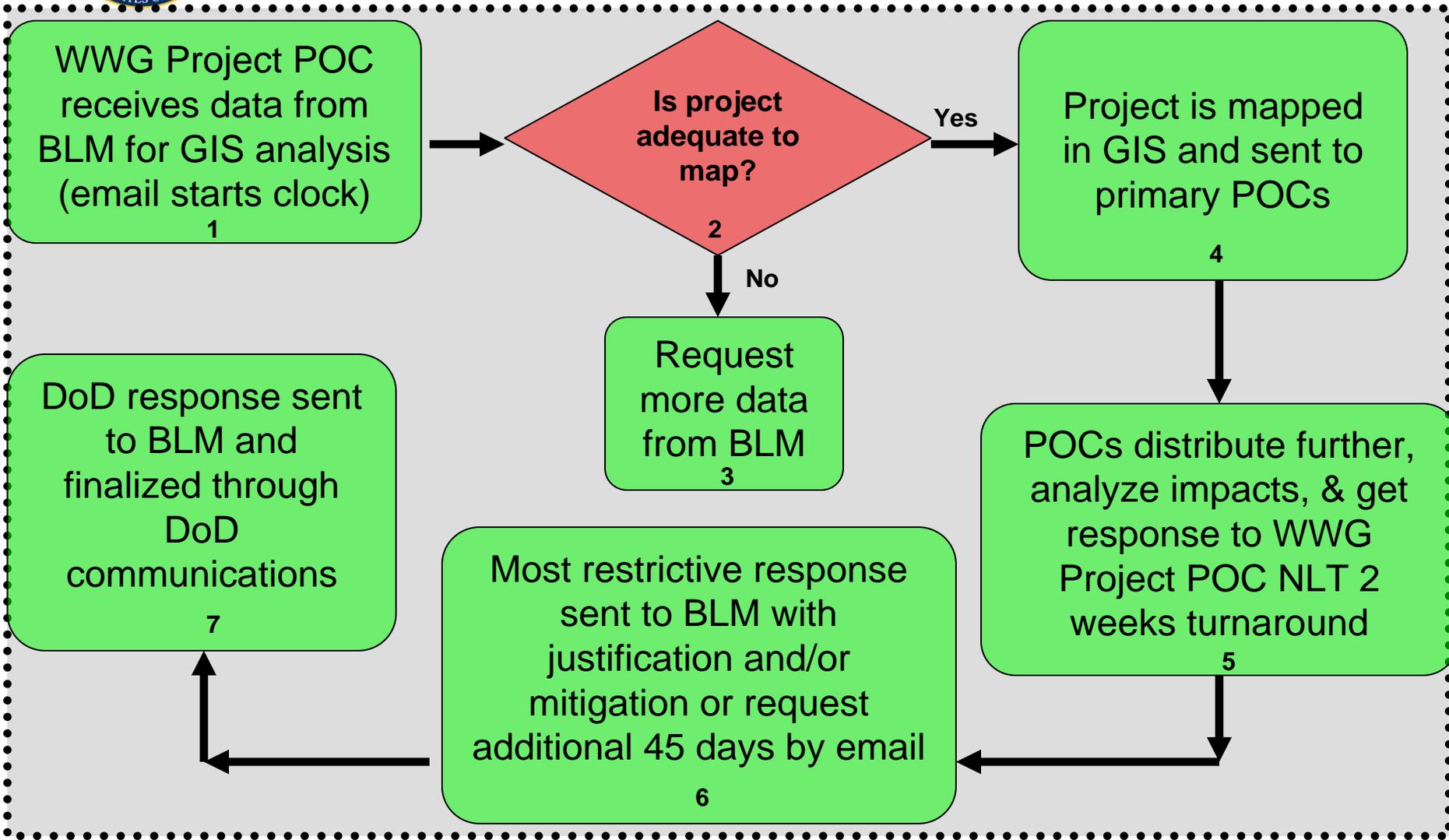
Specifically, the Protocol:

1. Establishes a process for DOD's review of and comment on proposed wind energy applications on BLM-administered public lands.
2. Provides a process to develop mitigation measures to minimize impacts on military activities and to increase opportunities for wind energy developers to utilize high value wind energy sites on public lands in the Western United States.

The Protocol recognizes that comments provided by DOD on any proposed wind energy project on public lands are recommendations and that the BLM has the ultimate responsibility for the allocation of land uses on public lands and retains the decision authority regarding applications for the use of the public lands. However, BLM fully acknowledges DOD's vital national security mission and commits to work closely with



DoD SW Wind Work Group Process Flow (for BLM Applications)





Regional Planning Efforts

- **DoD/BLM Wind Energy Protocol MOU (extend to solar and other agencies)**
- **Solar Energy PEIS**
- **Work with Office of Secretary of Defense to move DoD Southwest Wind and Solar Work Group process national**



Nevada Next Steps

- Support the next DoD/BLM Interagency Meeting tentatively moved to November and implement new Memorandum of Understanding
- Work with Renewable Energy Transmission Access Advisory Committee representatives to provide requested information and rework military page on website to update with current resources and issues
- Attend/provide updates to the Nevada Wind Work Group



The Train Has Left The Station !!!!



ALL ABOARD !!!