



# DOD Military Aviation and Installation Assurance Siting Clearinghouse



Steve Sample Executive Director

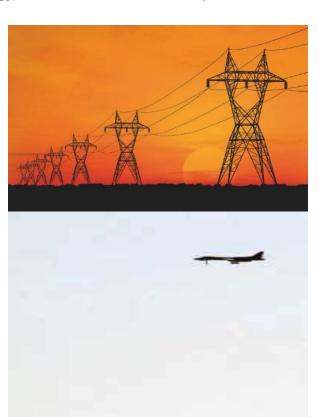
August 2023



### Typical Energy Siting Concerns from Wind Turbines

**OASD (Energy, Installations and Environment)** 

- Wind Turbine Electro Magnetic Interference (EMI)
  - Test, Training, and Operations radars
  - Military and Civilian Air Traffic Control
  - DoD Special Function Radars
  - Weather Radar (NEXRAD)
  - Military Telemetry Systems
- Low-level Flight Obstruction
- Offshore Ops Conflict
- Lighting
- Foreign investment and security
- ICBM Impacts





# All Energy Projects via the FAA

Wind, Solar, Transmission and Utility

OASD (Energy, Installations and Environment) -

#### Received

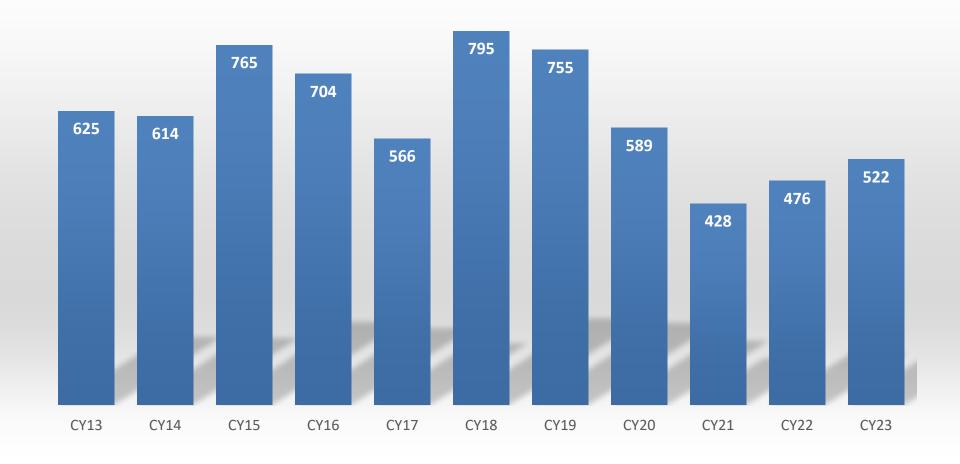




# Wind Projects via the FAA

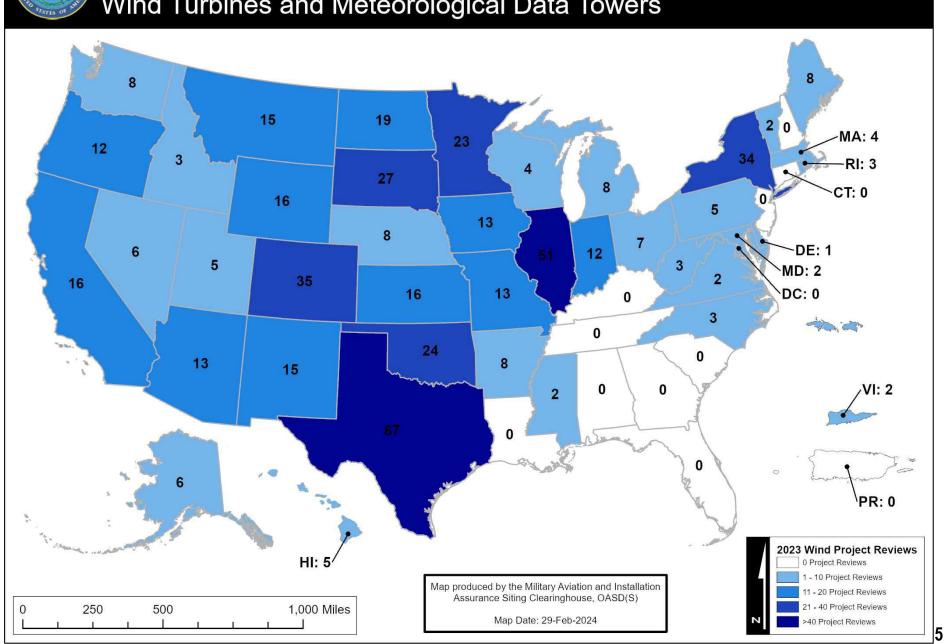
OASD (Energy, Installations and Environment) -

#### **Received**



### CY 2023 Siting Clearinghouse Project Reviews

Wind Turbines and Meteorological Data Towers





### Clearinghouse Project Reviews via FAA (2014-2023)

OASD (Energy, Installations and Environment) -

•	Projects Reviewed:	48,158	
•	Projects with Identified Adverse Risk:	479	
•	Resolved with No Agreement:	232	
•	Agreements Signed:	150	
•	Stopped through States	2	
•	Formal Objections:	1	
•	MRTs still active:	90	



### **State Protections**

OASD (Ener	gy, Installation	s and Environment)
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- Encourage early engagement
  - Informal Reviews
  - Risk Avoidance
- Facilitate thorough decision-making
  - States retain authority
  - DoD provides mission compatibility assessment
- Provide protection when projects present an unacceptable risk to national security
- DoD can work within state framework
  - Timelines
  - Customize the process to fit state process



### State Protections - Examples

OASD (Energy, Installations and Environment)

- Alabama: Section 11-106-06, Encroachment or Adverse Effect upon Military Operations, etc.;

  Application and Documentation Requirements; Approval by Local Government

  http://alisondb.legislature.state.al.us/alison/codeofalabama/1975/11-106-6.htm
- Indiana: Title 36, Article 7, Chapter 30.1, Planning and Zoning Affecting Military Bases http://iga.in.gov/legislative/laws/2021/ic/titles/036#36-7-30.1
   Indiana Senate Bill 411/Public Law 90 (2022)
   http://iga.in.gov/legislative/2022/bills/senate/411
- Indiana Senate Bill 257/Indiana Code, Title 8, Article 21, Chapter 10
   http://iga.in.gov/legislative/2020/bills/senate/257#document-c160ee86
- Oklahoma: Statutes, Title 17, Section 17-160.20, Setback Requirements
   http://webserver1.lsb.state.ok.us/OK\_Statutes/CompleteTitles/os17.rtf
- Wyoming: Title 18, Chapter 5, Article 5, Wind and Solar Energy Facilities and Wyoming Statutes Title
   35, Chapter 12, Industrial Development and Siting

https://www.wyoleg.gov/StateStatutes/StatutesConstitution

### https://www.dodclearinghouse.osd.mil/



#### The Clearinghouse

The Department of Defense's (DOD) Military Aviation and Installation Assurance Siting Clearinghouse (the Clearinghouse) was established by the Secretary of Defense in Fiscal Year 2011 to provide a timely, transparent, and repeatable process to evaluate potential impacts as well as explore potential mitigation options related to alternative energy production while preserving the military mission.

The Assistant Secretary of Defense for Energy, Installations, and Environment oversees the Clearinghouse.

Download the Clearinghouse Factsheet

Learn more about the Clearinghouse

#### **Our Mission**

The Clearinghouse works to protect the Department's mission capabilities from incompatible energy development by collaborating with DOD components and external stakeholders to prevent, minimize, or mitigate adverse impacts on military training, testing, and readiness. We strongly encourage developers to request an informal review early in the process.

Request an Informal Review

#### Resources

Work with the Clearinghouse to ensure renewable energy projects are compatible with the Department's mission and operations, and to mitigate against potential impacts.



#### Information for Project Developers

We consolidate the inputs of DOD branches offices, and bases that conduct analyses to assess potential impacts on their missions. We strongly encourage developers to request an informal review early in their project development to identify potential incompatibility and reduce costly delays in the future.



#### Guidance for State and Local Government

We work with state, local, and Tribal governments, and Federal agencies on legislative efforts and educate stakeholders about the process, relevant codes and legislation, and potential risks to national security.



#### **Our Review Process**

We conduct formal and informal reviews of proposed renewable energy projects to ensure that the siting and design are compatible with military missions and operations. If necessary, we connect project developers to the appropriate federal entity for their project location.





### **Impact Mitigation Solutions**

OASD (Energy,	Installations and	<b>Environment</b>
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- When impacts are found, the most commonly used solutions are:
  - Site Modification: Move turbines that obstruct flight testing and training
  - Curtailment: the turbine blades are slowed or stopped from spinning under certain circumstances to limit impacts to radar
  - Radar Optimization: optimization to account for new turbines may provide relief
  - Hardware upgrades: additional radar sensors may improve coverage/ overcome degradation
  - Security review: Vetting and/or inspection by DoD
  - Accepted Impacts: DoD does not deem all impacts as unacceptable and may simply accept a new avoidance area or incremental degradation