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Wind Powering America (WPA) works with Federal agencies to:

- Increase their understanding of wind resources and assessment;
- Facilitate project development activities through Met tower loans, wind data analysis, and technical assistance; and
- Provide advice on RFP development and financing options.

WPA provides educational opportunities to the Federal sector, as demonstrated by conducting two intensive 3-day workshops (May 20-22, 2008, MMR, Cape Cod, MA and Feb 3-5, 2009, Golden, CO) targeting federal energy managers, facility managers, and site engineers. These workshops engage participants with detailed wind technology information, project development processes, and industry participants/contacts.

Federal Sector Projects are Challenging

The Federal sector has several unique challenges in completing wind turbine projects, including:

- NEPA requirements typically require more investigation than comparable private sector wind projects.
- Radar and airport issues provide siting challenges, especially at DoD bases with radar, an airport, or both.
- Financing mechanisms such as ESPC, appropriations, ARRA, and ECIP have different award metrics and performance requirements.
- Mission conflicts may exist as wind turbine projects detract from accomplishing existing agency mission goals or interfere with training missions at DoD bases.
- Long-term utility contract terms may be difficult to change.

Federal Policy & Agency Drivers:

EPAct 2005

- Federal electricity consumption from RE sources must reach
- > 3%: FY 2007- FY 2009
 - > 5%: FY 2010 - FY 2012
 - > 7.5%: 2013 and thereafter.

Executive Order 13423

Renewable energy requirements – at least 50% from new RE, on-site if possible.

Federal Agency Goal Drivers

- DOE: 185 GWh/year of RE
- DOD: 25% of electricity from RE by 2025
- USCG: 15% energy from RE by 2015.

20% Wind by 2030

Wind industry target for the Federal sector:
~ 4,000 - 5,000 GWh/year of wind generation.

Existing Federal Wind Projects

Federal Wind Sites	# of Turbines	Turbine Size	Manu- facturer	Wind Plant Capacity	Install Year
	[#]	[kW]		[kW]	[Year]
San Clemente Island, CA	3	225	NEG Micon	675	1998
Guantanamo Bay, Cuba	4	950	NEG Micon	3,800	2005
Warren Air Force Base, Cheyenne, WY	1	2,000	Gamesa	3,200	2009
	2	600	Vestas		2005
Air Force Ascension Island, St Helena, UK Territory	4	225	NEG Micon	2,700	1996
	2	900	NEG Micon		2004
Victorville Prison, Victorville, CA	1	750	Vestas	750	2005
Camp Williams, Riverton, UT	1	225	NEG Micon	225	1999
	1	660	Vestas	660	2005
Marine Corps, Barstow, CA	1	1,500	AAER	1,500	2008
Total	20			12,010	

Federal Wind Resource Assessment Activities



Installation of 50-m Met tower by AEI of West Texas A&M at GSA Border Station site in Donna, TX.



NREL's Mini-SODAR unit deployed at Fort Carson, CO site. Unit was installed alongside a 50-m Met tower. Mini-SODAR installed by Atmospheric Systems Corporation.



60-m Met tower installation at Naval Magazine on ridgeline in western Guam. Installation by DNV-GEC.

New Federal Wind Projects in Progress

