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U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy

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DOD Evaluates the Renewable Resource Potential of Military Sites

Recently, the U.S. Congress directed the Department of Defense (DOD) to assess the potential for the development of renewable energy resources on DOD-controlled lands, as well as the cost-effective purchase of renewable power. DOD occupies more than 400 installations on more than 25 million acres in the United States. DOD's interest in obtaining secure power supplies through private industry has been renewed, and commercial power developers are interested in exploring renewable resources on DOD-controlled lands.

DOD's renewable energy assessment is a joint-services program with the U.S. Air Force leading the evaluation. The assessment will focus on installation-based power production from geothermal, wind, and solar resources. Studies are underway to review the Military's large pool of installations and facilities, and assess the commercial viability of each renewable resource. The Department of the Navy is evaluating the on-site potential for solar and geothermal development, and the Air Force will assess the potential for wind resource development. Independent renewable energy industry consultants are members of each

technical study team, assisting with site and technology evaluations. DOD is providing a platform for resource development should private energy developers provide development financing.

The Services resource study teams are identifying DOD installations that are compatible with each renewable resource and evaluating the level of the installation's potential for on-site development by reviewing:

- the current and future mission of the installation,
- the base's mission critical operations,
- the base's electricity requirements,
- any operational issues, and
- other Military and economic factors.

The restructuring of Military missions may result in the exclusion of some DOD sites, or increase a site's potential. Many National Guard and Reserve installations are co-located with civilian properties, such as commercial airports, introducing technical, land use compatibility, and other issues.

The objective of the resource evaluation is to generate a list of DOD installations with the highest potential for renewable resource development that are compatible

with mission requirements. Sites with the best development potential will be selected for creating a "business case" for renewables development. Emissions and energy security benefits will be factored into the business case analyses as well. The studies are expected to support a "good business practices" strategy for DOD development and procurement of renewable resources. "Due to large military power requirements, and the growing recognition of the value of secure power, the renewable energy assessment takes several steps beyond traditional agency mapping, evaluating how much power and which locations can securely provide renewable energy resources," said Dr. Get W. Moy, P.E., Director, Utilities and Energy Use, Office of the Deputy Under Secretary of Defense for Installations and Environment.

Additional analyses of legal, regulatory, and institutional barriers to develop renewable resources on DOD sites will also be identified. The assessment, due to Congress in summer 2004, will serve as a "roadmap" for DOD to cultivate on-site renewable power projects and/or purchase renewable power.

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