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Largest solar array in DoD now online

by Airman 1st Class Chris Massey 355th Fighter Wing Public Affairs

A ribbon cutting ceremony for the new Davis-Monthan Air Force Base photovoltaic solar array project was held Feb. 13.

The 16.4 megawatt solar array is the largest of its kind on any U.S. Department of Defense installation.

"It is satisfying and gratifying, after 25 years in this industry, the leadership that has been shown and continues to be shown by the Air Force and DOD in leading and showing the way forward around a clean cost effective energy future," said Bill Green, Chief Executive Officer of MIC Solar Energy Holdings LLC.

In 2010, Davis-Monthan entered into an agreement with SunEdison, LLC to design, finance, build, operate and maintain the array on 170 acres of underutilized land at two locations on base. The agreement will provide approximately 35 percent of the base's electricity requirements, at an economically beneficial rate for 25 years, reducing base utility costs by an average of \$500,000 annually.



More than eight percent of the Air Force's electricity comes from renewable sources. It has a goal to increase renewable energy consumption to 25 percent by 2025. (U.S. Air Force photo/1st Lt Sarah Ruckriegle)

"This project will produce enough energy annually to power 3,000 homes; it will reduce carbon emissions equivalent to taking 7,500 cars off the road and it will save 20 million gallons of water," said David Hutchens, President of Tucson Electric Power. "That's a great effect for our environment and that's right here in our Tucson community." The Air Force is the largest consumer of energy in the federal government, spending more than \$9 billion annually in electricity and fuel costs. The Air Force is working to reduce energy consumption through various initiatives, including renewable energy sources, such as solar, with a slated

STORY CONTINUED ON PAGE 3

in this issue:

- Utility Rate NegotiationsFEMP Award Season
- Energy EUL Opportunities

As utility costs double, Air Force attorneys engage

by Jennifer McCabe AFCEC Public Affairs

The smart use of energy and water saves the Air Force money, but a decreasing demand has not overcome an increasing price. While facility energy use has decreased 37 percent since 1999, costs have increased 100 percent. Fighting this trend keeps a team of utility litigation attorneys at the Air Force Civil Engineer Center busy. AFCEC's Utility Law Field Support Center, a branch of the Air Force Legal Operations Agency, consists of four attorneys and two paralegals. The team represents the Air Force before state public service commissions in an average of seven rate hearings a year.

In 2012, the ULFSC helped Air Force installations avoid paying an additional \$4 million on annual utility bills. Total cost avoidance for 2013 is expected to be \$9.6 million, pending final decisions by public service commissions in three states.

For example, in December 2013, the ULFSC intervened in an electric utility rate case involving Florida's Gulf Power Company. The parties reached a settlement that lowered the utility company's initial requested base rate increase from \$90.8 million to \$55 million. The settlement, approved by the Florida Public Service Commission, avoided a \$1.7 million increase in utility costs for Air Force and Navy, including Tyndall and Eglin Air Force Bases, Hurlburt Field and Naval Air Station Pensacola.

ULFSC Chief Lt. Col. Gregg Fike says approximately 15 percent of an installation's operating budget is spent on utility services per year.

"Since the tax dollars that are used to pay the utility bills for military installations come from the operations and maintenance budget, every utility rate increase that is avoided is another dollar that commanders can use towards fulfilling their installation's primary mission," said Fike.

The Government Services Agency, known as GSA, delegates authority to the Department of Defense to represent federal interests at rate hearings. Responsibility for the various DOD installations is divided between the Air Force, Army and Navy, depending on which Service has the largest usage in a particular utility's service territory. The Air Force is the lead service for 31 utility companies across 19 states. shoulder the burden of the utility rate increases," said ULFSC attorney Major Chris Thompson.

The Air Force spent approximately \$1 billion on facility energy last year. "As federal customers, we bring a slightly different set of issues and concerns to the proceeding, which may differ from other large customers," said ULFSC Attorney Karen White. "Therefore, it's vitally important that the ULFSC and our counterparts in the other Services participate in these cases to represent the unique interests of our installations." Thompson feels that the ULFSC efforts



Members of the Utility Law Field Support Center, located at the Air Force Civil Engineer Center, toured Gulf Power's Lansing Smith generating plant in Bay County, Fla., last month. The ULFSC recently negotiated with Gulf Power to lower the utility company's initial requested base rate increase from \$90.8 million to \$55 million. Pictured left to right: Ebony Payton, paralegal; Karen White, attorney; Lt. Col. Gregg Fike; ULFSC chief; Maj. Chris Thompson, attorney; Capt. Drew Jernigan, attorney; Tech. Sgt. Toribio Garcia, paralegal. (U.S. Air Force photo/Jennifer McCabe)

When a utility company files for an increase, the ULFSC analyzes the impact. If the increase is "significant" in either dollar value or precedential value, the Air Force will intervene before the state public utility commission, file discovery and testimony, and then litigate at the hearing with the other parties. The Air Force is usually among the largest customers of the serving utilities. "If we do not intervene in these rate cases and represent the interests of the federal government, then representatives of the other customer categories (e.g. residential, small commercial) may believe the federal government can

are making a difference, and he's glad to be a part of a team that impacts the Air Force's bottom line.

"At the end of the day, the ULFSC can look at our efforts and know that we are helping installations steward their precious operation and maintenance dollars wisely," said Thompson. "It's a great feeling, knowing we make a real difference to the Air Force."

Base civil engineers who receive rate increase notices should notify AFCEC by calling (888) 232-3721.

March 2014

Largest Solar Array...

STORY CONTINUED FROM PAGE 1

goal to increase its renewable energy consumption to 25 percent by 2025.

Energy efficiency reduces operating costs and increases available funds that can be spent caring for Airmen, the mission and other AF priorities, such as recapitalization and modernization efforts.

"When you look at the money saved over 25 years, it's incredible and also critical to our mission, not only to D-M, but also to the DoD," said Col. Kevin E. Blanchard, 355th Fighter Wing commander. "We are looking across the DoD right now for every avenue that we can find to save money and put that money into readiness and sustainment of our force. By saving money on D-M's electric bill, that will help the future of our Air Force, the greatest air force in the world."



Solar panels collect sunlight at Davis-Monthan Air Force Base, Ariz. The Davis-Monthan solar array is on 170 acres of underutilized land, making this the largest of its kind on any U.S Department of Defense installation. (U.S. Air Force photo/1st Lt Sarah Ruckriegle)

FEMP award season underway

Each year the Department of Energy's Federal Energy Management Program, in conjunction with the Federal Interagency Energy Management Task Force, sponsors the Federal Energy and Water Management awards to honor outstanding federal agency achievements in energy, water and fleet management. The Air Force continues to excel in this award program, claiming 21 winners in the last four years.

Similar to last year, a total of 15 Air Force nominations are allowed including facility, vehicle, aviation and operational energy submittals. The Air Force will use a two-step process to select the best nominations. The first step is to submit an initial summary on the FEMP central web site by March 13th.

https://www.fempcentral.com. Those chosen to submit a complete awards package will be notified by email.

FEMP is offering a one-hour webinar February 27 and March 18 that will provide an overview of the 2014 Federal Energy and Water Management Awards criteria and eligibility requirements, as well as tips on how to prepare nomination narratives. Click here to register https://www.fempcentral. com/beta/Training/EventRegistration/ WorkshopRegistration.aspx

For more information about the Federal Energy Management Awards, visit FEMP's web site at http://energy.gov/ eere/femp/articles/federal-energy-andwater-management-awards

You can also contact SAF/IEN at 571-256-4711 or AFCEC at 850-283-6653.

Management Awards has the Air Force won since 2010?

Answer on the back page

Enhancing energy opportunities

by Breanne Smith AFCEC Public Affairs

While Air Force leaders work to find ways to meet increasing federal energy mandates, a team of project managers within the strategic asset utilization division at the Air Force Civil Engineer Center works to identify installations with viable sites to lease for business opportunities- including energy production. Currently, there are eight energy-based Enhanced Use Leases in execution with the potential to produce approximately 928 megawatts of energy. This is a combination of renewable and clean energy.

An Enhanced Use Lease, or EUL, is a partnership between the Air Force and public entities or private developers to create mutually-beneficial commercial projects on non-excess Air Force real estate. In exchange for leasing property, the Air Force receives cash or in-kind consideration from the lessee at or above fair market value, providing the installation with an additional revenue stream for infrastructure needs. This is a way to meet Air Force expenses while relieving some of the burden on taxpayers.



Energy Management Awards has the Air Force won since 2010?





In 2012, the AFCEC EUL team began pursuing energy generation projects at Joint Base McGuire-Dix-Lakehurst, N.J. The developer is considering an energy park, combining several clean energy technologies together in one location. Significant clean natural gas generation is also under consideration in combination with renewable energy technologies.

"It's our job to identify market-worthy opportunities that will generate revenue for Air Force installations, and match those opportunities with qualified developers," said Alex Colby, the division's business development branch chief.

"There are numerous energy developers looking for property located in areas conducive to both clean and renewable energy production; it's in our best interest to identify non-excess property that fits that mold."

Of the eight energy leases awaiting finalization, two are expected to close later this year. In January, the Air Force entered into negotiations with Arizona Power Service to lease 106 acres at Luke Air Force Base, Ariz., for a solar generation facility as part of the base's proposed EUL. The facility, which will be fully constructed, operated and maintained by APS, will generate on-site renewable energy to help meet Air Force renewable energy goals. Another installation that could reap the benefits of a renewable energy lease is Robins AFB, Ga. Air Force leaders hope to enter into a lease agreement by early spring.

"These agreements will secure guaranteed revenue for years to come," said Dave Funk, the division's execution branch chief. "It's important that we build those strong foundations and set our installations, and our communities, up for success---we call that being 'Battle Ready.""

As the division prepares to close on its first round of energy EULs, project managers aren't slowing down in their quest for more projects in the energy market. The Air Force has selected a proposal by the Starwood Siemens team, with lead developer Energy Management Inc., to pursue energy ventures on four land parcels at Joint Base McGuire-Dix-Lakehurst. The proposed project could generate 50 to 60 megawatts of energy.



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