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ENERGY express

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Air Force Utility Law Field Support Center: Engaging in the Regulatory Arena

By Jess Echerri
AFCEC Public Affairs

It goes without saying, Air Force dollars are an important resource towards mission accomplishment.

Budgeting for energy and other utilities is essential to ensure Airmen have the power they need to carry out their missions. But because utilities are paid from a base's operations and maintenance account, spending too much can take away from other missions. That is where the Air Force Utility Law Field Support Center comes in.

The ULFSC is a joint team with attorneys and paralegals from the Air Force Legal Operations Agency, Environmental Law and Litigation Division and the Air Force Civil Engineer Center Legal Office, embedded with AFCEC at Tyndall Air Force Base, Florida. The ULFSC is the sole Air Force utility litigation team, responsible for representing federal executive agencies, or FEA, including the Air Force, at state regulated utility commission hearings across the continental United States and Alaska. In addition, the ULFSC provides full spectrum legal support to Air Force commanders, legal offices and energy managers for utility contracts, energy renewable projects and energy conservation projects.

"It's an exciting time to be part of such a dynamic team," said ULFSC Chief Lt. Col.

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Airmen from the 90th Fighter Squadron at Joint Base Elmendorf-Richardson, Alaska, repair an F-22 Raptor during Exercise Polar Force 13-5. The Utility Law Field Support Center at the Air Force Civil Engineer Center at Tyndall Air Force Base, Florida, recently engaged in a legal case at the Alaska base that will potentially save the base $400,000 annually in utility costs. (U.S. Air Force photo/Airman 1st Class Tammie J. Ramsouer/Released)

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SOLAR READY VETS

Program readies first class at Hill AFB

by Crystal Young
75th Air Base Wing Public Affairs

HILL AIR FORCE BASE, Utah -- The Solar Ready Vets program announced by President Barack Obama during a visit to Hill Air Force Base in April 2015 began training the first class of 24 veterans transitioning to the civilian workforce this month.

The training, which began Feb. 1, is being provided by Salt Lake Community College in partnership with the Department of Energy, which oversees the initiative. Some of the training will take place in Hill classrooms and some will be online "self-driven" learning.

"We've got to be relentless in our work to grow the economy and create good jobs," Obama said during his visit. "I think everybody here at Hill understands that one of the most important aspects of national security is strong economic security."

President Barack Obama speaks to a group of Utah elected officials, base leadership and news media April 3 at Hill AFB to announce Solar Ready Vets, a program to train veterans for jobs in solar energy. (U.S. Air Force photo by R. Nial Bradshaw)

Hill was chosen to be part of the program based on the number of exiting military personnel from the installation, the strength of the surrounding solar market and the capacity of nearby training institutions.

The base acquires 20 percent or more of its overall energy from renewable energy sources. The solar array was completed in June 2009, making it Utah's largest ground-mounted photovoltaic system at the time.

"We take pride in the energy initiatives we have underway here," said Col. Ron Jolly, 75th Air Base Wing installation commander.

Obama said the new program is one of many steps to help nearly 700,000 veterans and military spouses get a job.

Hill is the fourth base to implement the program, which is already underway at Camp Pendleton, California, Fort Carson, Colorado and Naval Air Station Norfolk, Virginia. The program has already delivered 150 military veterans ready to begin careers in the solar energy career field, one of the fastest growing job sector's in the country.

While veterans are not guaranteed a job, the DOE reports that all of the participating veterans have been extended job offers from renewable energy companies participating in the initiative. Starting salaries for these types of positions average $20 to $24 per hour. The program prepares veterans to be strong candidates for a wide range of solar energy careers, including management, photovoltaic installation, sales and technical positions.

According to the DOE, the Department of Defense is the largest consumer of energy in the federal government. So, to meet new goals set out in an Executive Order signed March 19, 2015, for the federal government to reduce emissions, some of the Solar Ready Vets graduates may return to bases, helping build solar arrays that improve energy security.

The program is tied to the Department of Defense's SkillBridge Initiative, a program designed to equip active duty military personnel within six months of moving to veteran status with skills to enter the civilian workforce.

The Energy Department is working with the Department of Defense to expand Solar Ready Vets to a total of 10 military bases by late spring 2016.

"We have eight currently registered with more Airmen expressing interest every day. Many are currently working through the application process," said Capt. Joshua Tate, deputy director of the 75th Force Support Squadron.

The classes are paid for by the DOE during the startup phase and funding for continuing classes can be paid for by the members' GI Bill benefits, Tate said.

Active-duty service members or veterans of any branch located on or near the installation who would like to participate can contact Rebecca Delgado at 801-586-5451 or Capt. Joshua Tate at 801-777-7333.

ULFSC, continued from pg. 1

John Degnan. "Energy costs and energy resiliency are critical factors in ensuring the mission is completed."

In 2015, the ULFSC participated in 12 utility rate cases in 10 states. The team's aggressive intervention and litigation prevented utilities from applying $733.32 million in unnecessary charges to rate-payer utility bills, said Drew Jernigan, AFCEC utility litigation attorney.

"We want to pay our fair share of the energy costs," Jernigan said. "What our team brings to the federal government is the litigation skill to ensure state commissions adjudicate fair and reasonable rates for FEA and the ratepayers."

A recent example of the ULFSC's success is the joint-service extended use lease with Gulf Power Company. This EUL leased 240 acres of underutilized, non-excess land at Eglin Air Force Base, Naval Air Station Pensacola and NAS Whiting Field in Florida, to build three utility-scale solar electric generating facilities that will provide 140 megawatts of solar power toward the Navy's and Air Force's one-gigawatt goals. The ULFSC partnered with four parties, including the Navy Energy Renewable Team and Gulf Power Company, to accomplish the project.

"It was a real partnering opportunity for our team to work together to accomplish these important projects," said Master Sgt. Toribio Garcia, ULFSC paralegal. "It was a win-win for the Departments of Air Force and Navy, Gulf Power Company and the local communities."

The UFLSC team currently consists of five members: one active-duty judge advocate general, a reserve JAG, one civilian attorney and two paralegals.

"We may be a small force, but we've had a tremendous impact and success defending the Federal Executive Agencies and Air Force bases and I am very proud to be part of this team," said Ebony Payton, ULFSC paralegal. "By building coalitions inside the courtroom and partnering with other affected parties, our team has stretched its limited resources and achieved astounding savings around the country."

That work has not gone unnoticed by the team's AFCEC partners, who have viewed the UFLSC as an asset worth supporting.

"There are very few organizations that can really say they provide a significant savings to the Air Force," said AFCEC Energy Directorate Deputy Director Lt. Col. Brian George. "Even with limited manning, the UFLSC does that 10 times over. They prove it every year, every case."

When not working in the courtroom, the ULFSC members are advising bases on the legal requirements involved with obtaining their electricity, water and gas utilities. That advice runs the gamut from providing legal advice to bases contracting for utility services, to being part of multidiscipline, multiservice teams that plan and construct multimillion-dollar solar arrays on installations.

"The scope of our responsibilities and the dollar amount of our impact despite our small team makes me proud of the work we put in here," Garcia said.

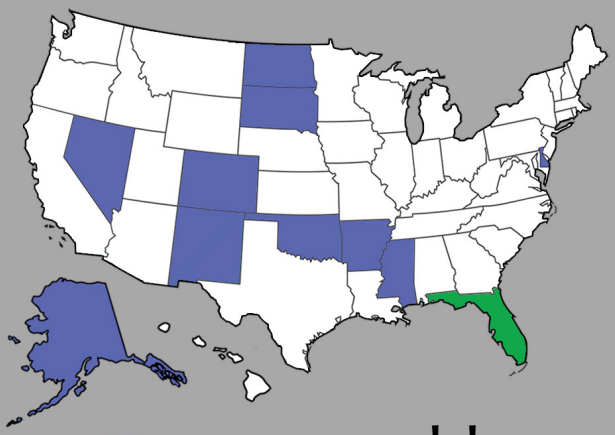
Degnan said he expects AFLOA and AFCEC to continue working together in the future.

"AFCEC is in the process of building a new legal workspace, and that investment is a credit to our team's hard work and dedication to the energy mission," he said. "This partnership between AFLOA and AFCEC is saving valuable money so our commanders have more resources to fly, fight and win."

ULFSC in 2015

12 utility rate cases

$733.32 million in utility costs avoided

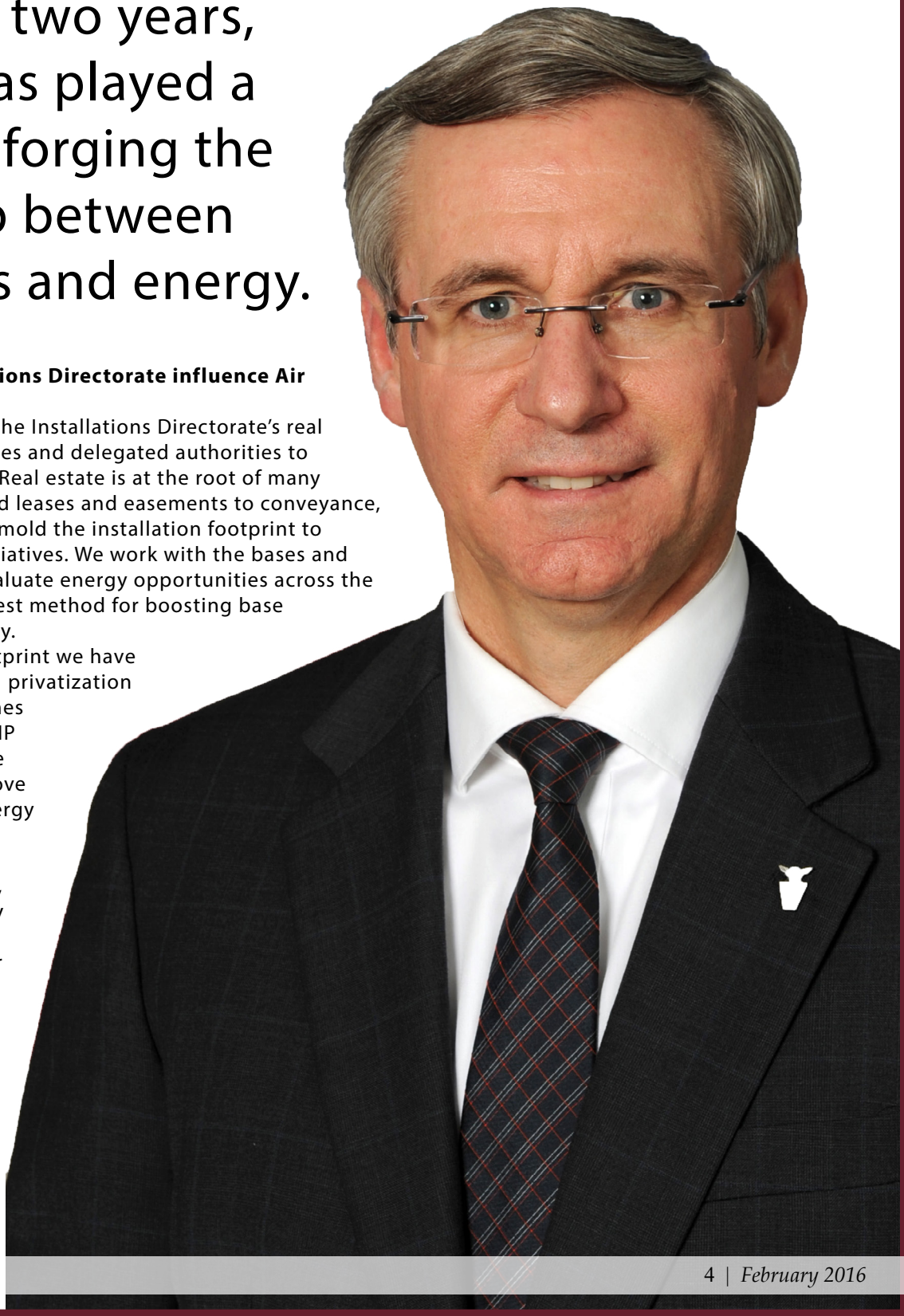


3 renewable energy enhanced use leases

120 MW estimated solar energy to be developed

Robert Moriarty

Robert Moriarty has led the Air Force Civil Engineer Center's Installations Directorate for the past two years, where he has played a vital role in forging the relationship between installations and energy.



How does AFCEC's Installations Directorate influence Air Force energy?

The Air Force depends on the Installations Directorate's real estate expertise, business lines and delegated authorities to meet our energy objectives. Real estate is at the root of many energy projects. From ground leases and easements to conveyance, real estate has the power to mold the installation footprint to support Air Force energy initiatives. We work with the bases and the energy directorate to evaluate energy opportunities across the service and determine the best method for boosting base resiliency and energy security.

Within the installation footprint we have 53,240 homes in the housing privatization inventory. Although the homes are privately owned, as the HP program execution office, we promote, evaluate and approve any renewable energy or energy conservation or efficiency projects our project owners want to pursue. For example, we worked with the property owner, Lend Lease and approved plans for a number of solar initiatives to include rooftop solar arrays that generate 4.84 megawatts of renewable energy for 270 new housing units at Joint Base Pearl Harbor-Hickam, Hawaii. In addition to diversifying energy sources, the program's solar investments will

eventually yield savings—money that goes directly back into the project to maintain housing communities, services and programs for our Air Force families.

Equally important is the Air Force's utilities privatization program, through which base electrical, gas, water and waste water systems are sold to third-party utility companies. As the UP source selection authority, it is my responsibility to authorize business deals that result in safe, modernized, energy-efficient systems. For this, I rely on my team's business expertise, private-sector experience and the performance data we capture in post-award portfolio management.

How do Air Force real estate professionals support mission assurance through energy assurance?

Aligning Air Force assets — like real estate — with industry needs is a powerful tool that allows the Air Force to reap the benefit of clean, fixed-cost energy and avoid additional operating expenses. With help from legal counsel, we've expanded real estate development services to include ancillary leases that support Air Force energy contracts and land restrictions that mitigate readiness and encroachment risks. We are currently executing ancillary leases for renewable energy projects the energy directorate is handling at bases in New Mexico, California and Massachusetts.

Real estate professionals also support energy assurance through enhanced use leases. EUL projects can seek infrastructure upgrades that improve energy assurance as in-kind consideration. For example, real estate development recently executed an energy-based EUL agreement between the Air Force and Gulf Power, an investor-owned electric utility company. In exchange for leasing 240 acres of underutilized, non-excess base property, Gulf Power will replace a substation switch and transformer to enhance energy resiliency at Eglin AFB in Florida. In addition to diversifying generation sources for the commercial grid, the 30-megawatt array also counts toward the Air Force's renewable energy goal.

At Nellis AFB, Nevada, we executed an EUL agreement that leased non-excess base property to the City of North Las Vegas for a new wastewater reclamation facility. In return, the base received $10.8 million for reclaimed water and pipe installations and a brand new fitness center. The $25 million facility is Leadership in Energy and Environmental Design, or LEED, certified silver.

How has the increasing demand for energy resiliency impacted the Air Force real estate profession? What are the challenges?

Resilient, cost-effective, cleaner power is more important than ever for the Air Force. Because real estate is at the root of many energy initiatives, it is critical we integrate our processes and statutory authorities with Air Force energy objectives and plans. The authority we use to lease non-excess, underutilized land, 10 U.S. Code 2667, requires we receive fair market value. This third-party funding or consideration from 10 USC 2667 EULs and power purchase agreemets are expected to fund many of these energy resiliency and security initiatives. The demand to improve installation resiliency through energy assurance requires real estate professionals at AFCEC and the installation not only look at the dollar value at play in a proposed deal, but also the mission-assurance value associated with enhancing energy resiliency. To effectively support Air Force energy goals and objectives, real estate professionals must work closely with our energy and base colleagues.

It is critical that we integrate our processes and statutory authorities with Air Force energy objectives and plans.

What advice do you have for base civil engineers on working energy assurance into their projects? What are the benefits?

I recommend early collaboration with AFCEC real estate professionals to ensure our real estate processes and authorities are integrated into the overall energy assurance acquisition strategy. AFCEC's real estate professionals have years of experience developing, soliciting and executing energy EULs, PPAs and other energy initiatives. I encourage base civil engineers to leverage this valuable resource as they address their energy resiliency issues.

BCEs and other key base personnel play an integral role in making our Air Force bases more resilient. Looking at our bases as a "system of systems," we're focused not just on energy, but also water, facilities, communications and support service in terms of improving our base's resiliency. The Air Force has always looked at air bases as a weapons platform. This new Air Force focus on resiliency will enhance mission assurance.

AFCEC's AMRS experts enhance meter knowledge

By Jess Echerri
AFCEC Public Affairs

Members from the FEDITC Advanced Meter Reading System team at the Air Force Civil Engineer Center at Tyndall Air Force Base, Florida, recently attended training on new energy meters.

Engineers and information technology practitioners on the AMRS team receive training on different meters to remain experts on integrating each model into AMRS.

Base energy managers at each base choose an AMRS-compliant meter when outfitting their installations, but they are not told which meter to choose specifically. The FEDITC AMRS team of IT professionals works to support the project managers who build the requests for proposal at each installation where AMRS will be installed. When writing the contracts, installations work with contracting officers like the ones at the Air Force Installation Contracting Agency.

"We interface with AFCEC engineers in the energy directorate to assess the technical approach," said Staff Sgt. Greg Jones, energy team contracting officer at the 772nd Enterprise Sourcing Squadron at Tyndall AFB. "Then we scrutinize the cost and pricing aspects of the proposal and ensure the Air Force is getting the best value from the company to which we are making the contract award."

Since each installation will get the best value from different companies, there are a variety of meters currently being used at each installation.

"We go out to the bases and they have a lot of meters, both new and old," said Joe Bober, a contractor with FEDITC and the AMRS IT team lead at AFCEC. "We need to be familiar with all of these models so we can come up with better solutions to integrate them into AMRS."

The training in New Orleans was hosted by Electro Industries Gauge Technologies. This is the second training event team members have been able to attend, increasing hands-on experience with meters and getting new information straight from the manufacturers.

"There were meters hooked up in the classroom and we were able to work with those to see what they are and are not capable of," Bober said.

Most meters need some modifications before they will work with AMRS, if they will work at all. Bober and five other IT professionals on his team must be aware of these required modifications so they can be ready to assist installations with their AMRS integration.

"It's allowing the team to identify potential pitfalls and to come up with solutions before they occur," Bober said.

For more information, contact the AFCEC AMRS Program Management Office at 850-283-3150.

An example of an elecricity meter at Tyndall Air Force Base, Florida. Each installation may use different meters that integrate into the Air Force's advanced meter reading system. (U.S. Air Force photo/Kevin Elliot/Released)

Hill AFB energy saving performance contract kicks off

By Jess Echerri
AFCEC Public Affairs

Base civil engineers at Hill Air Force Base, Utah, and the Defense Logistics Agency invited Energy Service Group, an energy service company, to perform a preliminary assessment of installation facilities Jan. 6 for an energy savings performance contract.

The preliminary assessment kickoff event allows ESG to identify potential energy conservation measures, or ECMs, and to estimate the time and cost of performing the required work.

The ESPC covers more than 50 buildings throughout the installation. ESG will aim to improve lighting, heating, ventilation and air conditioning, steam distribution, combined heat and power, energy efficiency in an inflatable building, and several other potential ECMs.

"The kickoff was great," said Air Force Civil Engineer Center ESPC Project Manager Robin Kitson. "Everyone was totally engaged and ESG really brought their A team. We found a lot of opportunities, especially in process energy."

Process energy includes energy used during painting, building parts and other similar tasks. For example, the energy needed to ventilate a space while painting an aircraft would be considered process energy. For example, dip tanks have multiple improvement areas including energy recovery, and water and heat conservation.

"Process energy accounts for 30 percent of Hill Air Force Base's total energy use, so focusing ESPC efforts there makes sense," said 2nd Lt. Mary Boyle, Hill AFB energy manager.

After the PA is completed and approved by engineers and contracting officials at Hill, AFCEC and DLA, ESG will perform an investment-grade audit. The IGA is based on an in-depth look at installation facilities and will provide decision-makers with the information to proceed with the project.

Under the ESPC model, ESCOs compete to finance, design, construct and manage energy projects, and maintain the systems long-term. ESPCs range from 10 years to a maximum of 25 years, with the Air Force paying the ESCO back over the term of the contract from cost savings garnered by the energy efficiency improvements they make.

An F-35A Lightning II takes off March 25, 2014, from Hill Air Force Base, Utah. Hill and the Defense Logistics Agency recently hosted the energy service company Energy Service Group to perform a preliminary assessment of installation facilities for an energy savings performance contract. (U.S. Air Force photo/Alex R. Lloyd/Released)

Energy service company selected for Spangdahlem ESPC

By Jess Echerri
AFCEC Public Affairs

The U.S. Army Corps of Engineers in Huntsville, Alabama, released a down selection decision document identifying Siemens as the energy services company, or ESCO, chosen to provide services for an energy savings performance contract, or ESPC, at Spangdahlem Air Base, Germany.

The primary scope of the ESPC will be to convert the heating and hot water systems in 32 facilities from fuel oil to natural gas. In addition to the natural gas conversion, the ESCO will examine all potential energy conservation measures, or ECMs, to maximize energy savings base wide.

USACE accepted proposals from all interested ESCOs this past November. Spangdahlem's energy managers and the project manager at the Air Force Civil Engineer Center at Tyndall Air Force Base, Florida, provided inputs to USACE when deciding which company would be the best match for this project.

"Siemens submitted a proposal that was best overall based on technical approach, management and past experience," said Morgan Hurst, AFCEC program manager. "Siemens' proposal stood out for presenting unique and potentially highly valuable ECMs."

Siemens will perform an assessment to provide sufficient information for the Air Force to make a decision on proceeding with the ESPC project. This assessment is based on a walk-through audit of the facilities plus a review of site energy and facility data provided by the base. It will provide a narrative summary, description of likely energy conservation measures, estimates of proposed energy and cost savings, and other information for decision-making.

Under the ESPC model, ESCOs compete to finance, design, construct and manage energy projects, and maintain the systems long-term. ESPCs range from 10 years to a maximum of 25 years, with the Air Force paying the ESCO back over the term of the contract from cost savings garnered by the energy efficiency improvements they make.

A-10 Thunderbolt IIs assigned to the 81st Fighter Squadron taxi on the runway at Spangdahlem Air Base, Germany. The energy service company Siemens was selected to complete an energy savings performance contract at Spangdahlem. (U.S. Air Force photo/ Airman 1st Class Gustavo Castillo/Released)

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