

In association with



DEPARTMENT OF DEFENSE'S RENEWABLE ENERGY PROGRAM

Exploring the challenges and opportunities



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Orrick and Clean Energy Pipeline have launched a series of reports dedicated to exploring investment opportunities and challenges in the U.S. renewable energy sector. In this first issue, we analyze the exciting investment opportunities arising from the Department of Defense's (DoD) major renewable energy procurement initiatives. This white paper pays particular attention to the impact that DoD power purchase agreement (PPA) contract clauses and language might have on the bankability and profitability of renewable energy projects.

Market update

The DoD has made a huge commitment to renewable energy. By 2025, the agency intends to source 25% of its power from renewable energy projects, which is a significant amount given that the DoD's annual energy spending totals some \$20 billion, making it the largest single energy consumer worldwide.

All three major branches of the U.S. military have made firm commitments to sourcing power from renewable energy, and each branch has ambitious and advanced plans. Each branch is committed to procuring at least 1 GW of renewable energy capacity by 2025.

In order to meet these objectives, each branch is taking varying approaches. The Navy and the Air Force have so far procured 254 MW and 60 MW of renewable capacity, respectively. The Army has procured around 45 MW. Importantly, each branch is generally only seeking to procure power from renewable energy projects and does not intend to own the generation assets. This means that the projects will have to be financed, built, owned, operated and maintained by third-party companies.

In 2012, the Army launched a \$7 billion renewable energy procurement program. The \$7 billion figure represents the total value of energy available for purchase through PPAs assuming a fixed 30-year term. In order to facilitate these goals, the Army issued a series of multiple award task order contracts (MATOC) that qualify sets of MATOC awardees to compete for Army renewable energy projects through project-specific contracts called task orders. The Army issued its first request for proposals (RFP) for MATOCs in 2012 and last year awarded 58 MATOCs across four sectors: solar (22), wind (17), biomass (13), and geothermal (6). An additional 21 MATOCs were awarded in January and February 2014. The Army Energy Initiatives Task Force (EITF) is expected to oversee and facilitate the issuance of the first task order RFP over the next several months. Similarly, the Army, working with the Defense Logistics Agency and the Army Corps of Engineers, is issuing one-off renewable energy contracts outside the MATOC initiative.

Why renewables?

The DoD is dedicating significant resources to renewable energy procurement primarily for strategic and security (rather than environmental, political or public relations) reasons. On-site renewable generation enables the military to be less reliant on aging transmission infrastructure and remote power plants, which are more susceptible to cyber attacks and natural disasters. Cost is also a factor. Entering into long-term PPAs allows the military to avoid the costs of constructing energy infrastructure and to lock in fixed prices that act as a hedge against volatile power prices.

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For example, a 16.4 MW solar PV project situated at the Davis-Monthan Air Force Base in Tucson, Arizona, is expected to reduce energy costs by \$500,000 annually for the next 25 years. The project, which came online in February 2014 and is the Air Force's largest constructed solar array, will deliver 35% of the base's energy needs.

“The military has determined that energy is an important operational and tactical resource in both deployed and domestic scenarios,” explained Nate Butler, Manager of Federal Programs at SunEdison. “The military is very focused on energy security for their domestic installations and are therefore looking for reliable and resilient power. Many domestic bases are directly supporting operational missions across the globe, and they need to be able to secure power for these activities.”

CASE STUDY

Davis-Monthan Air Force Base

On February 13, 2014, the DoD's largest solar PV project at the Davis-Monthan Air Force Base was officially commissioned. The 16.4 MW installation will deliver 35% of the base's electricity needs for 30 years and is expected to save \$500,000 annually in energy costs. The project was developed by SunEdison and sells power to the base through a 25-year PPA. The North American Development Bank provided \$35 million debt financing for the project.

Orrick provided legal advice to SunEdison on this project, specifically related to SunEdison's construction financing and sale of the project to Macquarie and Chevron. Orrick also provided government contracts and procurement advice related to the project. This installation is by far the largest solar energy renewable project built on an Air Force base.

Photograph: U.S. Air Force photo by 1st Lt Sarah Ruckriegle/released



Emerging obstacles to financing military-procured projects

The margins on renewable energy projects that sell power to the military are already very tight given that the government generally does not wish to pay higher prices for installation-generated renewable energy than it does to utilities. For this reason, it is essential that both industry and the government focus on PPAs in order to ensure they contain financeable terms and do not contain Federal Acquisition Regulation (FAR) clauses that are extraneous or not applicable to procuring renewable energy – as these extra clauses tend to significantly increase costs to the developer.

“The government has made clear they are not looking to procure energy at these installations at costs that are more than they pay utilities,” explained Christopher Gladbach, Senior Associate, Energy and Infrastructure at Orrick. “There is continual pressure for the DoD to reduce spending. There is no appetite at the moment to pay more for renewable energy at the installations.”

However, some PPAs currently offered by the military to renewable energy projects contain ambiguous language regarding key purchase and sale mechanics or include FAR clauses related to government contracting legal requirements that developers and investors are not used to or that are otherwise extraneous to the government's legal requirements. Some of these provisions are not palatable for the developer and banking communities at all, while others simply add costs. The three branches (often through committed groups such as the EITF) are working to understand and address

these issues and continue to work with the renewable energy industry to adapt PPA clauses to ensure projects are bankable while at the same time ensuring the military's requirements are met. However, there is still some way to go.

Some key issues of developers and investors are outlined below:

1. Termination for convenience

As a matter of law, government procurement contracts typically must provide the government with the right to terminate the contract for convenience. Although termination events are rare, there is often concern on the part of both developers and their financiers about perceived ambiguities regarding the level of compensation should a termination for convenience occur.

In order to resolve this issue, recent renewable energy PPAs with DoD facilities have tended to include a schedule that determines the level of compensation that will be awarded to the contractor for every year that a termination may take place after the facility is placed in service. This provides contractors and investors with some additional certainty.

“Despite nervousness on the part of some investors, looking at case law and the way these settlements work out, the contractors generally do tend to get

made whole,” confirmed Christopher Gladbach. “By that, I mean that they get their costs covered but not their future profits. This is often more than you would get in the private sector, where contracts can also be terminated. However, this remains one of the biggest issues for financing parties because many are new to financing renewable energy projects for the military. Many of these parties are requesting termination value schedules, which essentially set forth an assumed recovery amount during a given year of production. That said, even if the government actually provides these schedules (which is the predominant trend now), many banks will require further explanation and additional comfort on this issue.”

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2. Minimum annual production levels

Renewable energy PPAs with the DoD include commitments that the power purchaser will pay for a minimum annual production level per year. Beyond this level, the government typically only commits to pay for energy consumed, rather than the total volume of energy produced by the asset, as is generally the case with renewable energy utility PPAs. This effectively means that contractors will only build projects that meet the minimum annual production level, since there are no assurances that additional generation will be paid for.

In parallel, PPAs with the DoD typically require the contractor to pay liquidated damages if energy production does not meet a certain threshold. Liquidated damages would cover the costs of replacement energy.

Some early versions of PPAs and the model PPA put out by the EITF (which is intended to set the standard for all future task order contracts entered into under the MATOC and will also be an important precedent for other branch acquisitions) stipulated that contractors would be required to pay liquidated damages if assets did not meet the minimum annual production level. This was problematic for intermittent renewable energy generation because the minimum production level was effectively acting as a ceiling and a floor. If generation fell below this level then contractors would be required to pay liquidated damages, but production over this level would not necessarily be paid for by the offtaker if not required.

Encouragingly, the EITF modified this requirement in its model PPA to the extent that liquidated damages must only be paid if annual production falls below 75% of the minimum annual production level.

“The Army is now asking that it be compensated if annual production does not hit 75% of the minimum production level,” explained Harry Clark, Partner, International Trade & Compliance at Orrick. “But where these negotiations have ended up has been a bit all over the place. This whole area is not as systematic as it ought to be. One criticism of the overall program is that we are starting with every project and it doesn’t have to be this way. We are trying to work with the military services one by one to create a more systematic approach to ensure that things are going to be addressed in the same way.”

Less encouragingly, the model PPA still requires contractors to obtain replacement renewable energy credits (RECs) if they fail to provide RECs up to the minimum production. This effectively presents the same “floor and ceiling” problem discussed above and is one of the points that industry is requesting be addressed by the government.

3. Domestic Preference Rules

Domestic preference rules apply to acquisition of solar panels for DoD power projects, subject to the exemptions of the Trade Agreements Act. This means that solar panels must be sourced from the United States or another designated or qualifying country. Designated and qualifying countries include those that are parties to the World Trade Organization Procurement Agreement, have a free trade agreement with the United States, or have qualifying defense procurement arrangements with the United States. Notably, China is not party to any of these arrangements, meaning that solar panels cannot be sourced from China for any DoD project. Because Chinese solar PV panels are often the lowest cost option, developers must consider how procuring higher cost panels might impact project economics.

Apart from the special domestic preference rules applicable to solar panels, it would not seem that standard “Buy American” policies should apply to DoD power projects since the U.S. government’s commitment is to purchase electrical power—not the facilities or any other equipment. The facility and equipment systems remain the property of the contractor that produces the power. Still, contract and award documents have sometimes created uncertainty about application of general domestic preference requirements, which has, in turn, raised transaction costs.

4. Davis-Bacon requirements

Extensive discussions are taking place between the renewable energy industry and Federal procurement officers as to whether Davis-Bacon requirements should apply, although the current political environment and preliminary indications from the services suggest it is likely they will. Under the Davis-Bacon Act, laborers must be paid prevailing wages (as determined by the Secretary of Labor) when undertaking construction, alteration, or repairs to public buildings and public works. However, because the government is not using its contracting authority for the construction of renewable energy assets or providing for their financing—but is merely purchasing power—several in the industry are

arguing that these requirements should not apply. Contractors should follow this issue closely and understand how it might impact project economics.

“Davis-Bacon and domestic preference rules can materially add costs,” explained Harry Clark. “We believe that the better view is that Davis Bacon and domestic preference rules should not apply at all, apart from the domestic preference rules that relate to solar panels. They should not apply because the DoD is simply buying power, not the asset that is producing the power. The government has needlessly created uncertainty about whether these rules will apply or not and there needs to be certainty.”

The four issues outlined above should be given careful consideration by contractors when bidding for PPAs and, following award, when interfacing with financing parties and the government to construct and finance the project.

Beyond these discussed items, there are many more issues related to military procurement of renewable energy that need to be carefully considered by potential contractors. Orrick has worked on a number of transactions in this space and has experience dealing with many of these issues. We will continue to monitor developments and are available to assist clients in this area.



Key contacts

Orrick is a global law firm with nearly 1,100 lawyers that work as an integrated team across 25 offices throughout the globe. Orrick has one of the world's leading energy practices, composed of 100 lawyers with deep experience in the energy field focusing on projects in the United States, Europe, Asia and Africa. The energy practice is a core part of Orrick's overall strategy, allowing the practice to mobilize internal resources to expand our global outreach and take advantage of market opportunities. We are particularly noted for our leading practices in energy project development and finance, governmental energy funding, public private partnerships, and venture capital and emerging company representation in the clean tech and renewable energy sectors worldwide.

Lawyers in Orrick's renewable energy practice represent developers, lenders and investors in the wind, solar, geothermal, waste-to-energy, ethanol, fuel cell and other clean energy technology sectors. Our lawyers have significant experience in the development and financing of renewable projects all over the world, and they routinely draw upon the experience of members of the firm's securitization, real estate, bankruptcy, regulatory, environmental and litigation practices when handling such matters.



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Harry Clark is Chair of Orrick's International Trade & Compliance Group. He has extensive experience with government contracting matters, and his government contracting work has included, for example, design and implementation of U.S. Defense Department renewable energy projects.



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