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Commercial Solar

A drop in solar panel costs is driving greater deployment of this technology. At the same time, this technology is so new that interested parties may struggle to know exactly what will work best for their businesses in the long run.

Carter Wall of Franklin Beach Energy and Florence Davis of Day Pitney LLP explain the details of contracting for solar use and how to determine if it's right for your business.

Commercial Solar: A Potential Revenue Source for Property Owners

BY CARTER WALL AND FLORENCE DAVIS

It wasn't that long ago when cell towers were being built everywhere, and business owners were getting cold calls about putting them on their land and buildings. During the past few years, those calls have been replaced with calls from solar developers looking to install panels on rooftops, in parking lots and on available land, with some businesses being offered a bewildering array of options. This building boom is being driven mostly by the fact that the cost of solar panels has gone down by more than 80 percent since 2008. That, combined with generous government incentives, has made the economics favorable for solar development. Extension of an important federal tax incentive, which was scheduled to expire at the end of 2016, helps ensure that this boom in development will carry forward into at least the next few years.

Solar can be a lucrative addition to commercial property, but it is also a new technology with which many property owners have limited experience. Business and property owners may be faced with a multitude of options, struggling to determine which is the best fit for their particular operation, what are the pros and cons of each, and whether they are being offered a deal that

will be favorable to their business over the long term. This article explores some of the significant considerations.

The Business Basics.

Although some businesses look to solar for purposes of decreasing their carbon footprint or otherwise achieving sustainability goals, in the end, the decision regarding whether to host a solar project will depend on the economic value of doing so. The main sources of value for a solar project include (i) the power it produces; (ii) the tax incentives associated with the project and (iii) the environmental incentives.

The power produced by a project can, of course, be used on the customer site. If you own the project, you will pay no additional cost for the power it produces, so each kWh produced by the project represents a kWh you don't have to purchase from the grid. If you don't own the project, you will likely be paying the owner a rate for each kWh produced that represents a discount from what you would otherwise pay to your utility. The rate may be fixed for the term of the contract or subject to an annual escalation. Excess energy produced by the project will be ''sold'' back to the utility for a credit on your bill that can be used to offset the cost of energy used when the panels are not producing. The amount of the credit depends on the details of your state's net metering program, which will also dictate other project requirements, such as size limitations.

The owner of a solar project may also be eligible for tax incentives, the largest of which is the federal investment tax credit, which is currently 30 percent. As noted above, this tax credit was recently extended through 2019, at which point it will step down each year until it reaches 10 percent in 2022. In addition, solar projects benefit from accelerated depreciation under federal tax laws. Many states exempt solar equipment from property taxes.

Each megawatt-hour of electricity produced by a solar project also creates an environmental attribute, typically known as a ''renewable energy certificate'' or ''REC'' (sometimes ''SREC,'' for solar, or ''ZREC,'' for zero emissions). RECs can be sold by the project owner separately from the electricity, allowing you to sell the ''green'' attributes of the power you produce. In many states, utilities and other companies that supply electricity to end use customers are required to purchase RECs in order to comply with state renewable portfolio standards, creating a lucrative market for these products. In areas without these requirements, there is still a voluntary market for companies interested in purchasing renewable electricity to achieve environmental goals. A good source to look up your state's incentives is www.dsireusa.org .

Site owners may wonder whether and how an on-site solar project will affect property value. By significantly reducing utility costs, upgrades such as energy efficiency investments and solar energy systems can result in dramatically increased net operating income, and create new cash flows that theoretically can be capitalized into asset value. But because the technology is so new, property buyers and appraisers are still catching up, so the impact on your property value is currently difficult to quantify. At the same time, consider the effect of the structure you choose on your ability to transfer your property. If you are the owner of the project and have taken advantage of tax credits, a sale could trigger recapture of a portion of those credits. You should also make sure that any permits you have are transferable. If you are hosting a project and purchasing the power it produces through a power purchase agreement (''PPA''), the project owner (or its lender) may be required to consent to any property sale during the PPA term, depending on the assignment provisions of your contract. The buyer of a building may also refuse assignment of a PPA after the building is sold, so attention to the details of the PPA during property transactions is important.

Determining If On-Site Solar is Right for Your Business.

The initial consideration for any business thinking of on-site solar is **''What are the alternative uses and/or long-term plans for the site?''** A solar power generation system is a long-term piece of equipment, typically built to last 20 years. So it is important to consider before entering into any on-site solar arrangement whether you have any options for the solar site over that period of time that would produce more revenue. For example, is the empty lot you intend to use for solar arrays a potential site for future expansion? In addition, if there's a chance you may shut down the site, or transfer ownership of the property, you will want to consider the implications of those plans up front. As noted above, ownership transfer may trigger tax credit recapture for an owned project, and may require third-party consent for a project you don't own. Reduction in energy use at the site could affect the economics of the project depending on the terms of your PPA and/or your state net-metering laws. Considering your longer-term plans before deciding to move forward with a project can avoid future complications.

Another important consideration when determining whether to install solar is **''Is the site appropriate for solar?''** In some cases your project may require further study, for example to determine whether the capacity of the local distribution system is adequate to support the proposed project. There are other considerations, however, that can normally be assessed by any solar developer, who can let you know whether there may be an issue that could prevent your project from going forward. Some examples include:

- The site's proximity to three-phase utility power is the most important consideration if the system is not tied directly into your building's electrical system. Running a long electrical cable is expensive.
- Good access to sunlight is also a given. Solar arrays need direct sun to work. You will want to consider not only the current circumstances but also future plans, such as plans for adjacent buildings, additional roof-top equipment needs, and/or growth of surrounding trees.
- In the case of roof-top solar, you will need to determine whether the roof can bear the weight of the solar array. Ultimately, a structural engineer will need to make this determination, but most solar developers can eyeball your building and give you a general idea. If your roof is old and needs to be replaced before the system is built, there are companies that will roll the cost of the roof into the solar contract for you. You will also want to be sure the installation does not affect your roof war-

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ranty. Normally, this is simply a matter of having the warranty reaffirmed or renewed after the system is installed, and your roofing company will be happy to do it.

- In the case of ground-mounted systems, as long as there are no environmental concerns with the sites (wetlands, endangered species), a solar contractor will consider shading, grade, ground composition and orientation vis-à-vis the sun. A site that requires a great deal of work may affect the cost or the size of the project but will not necessarily prevent a project from being economically viable. If a lot of site work has to be done, obviously that affects the price, but it is not necessarily a deal-breaker. NIMBY (''not in my backyard'') challenges should also be considered, particularly if your site is within view of any residential areas. In some towns, a small group of motivated homeowners can completely block a project.

- Carport systems, which can be a great use of real estate, require a fairly large parking lot to be economically worthwhile. There are developers who specialize in carports. There are also obviously unique operational considerations, such as snow removal and drainage, which require careful planning.

The final threshold consideration is **''What are your goals for a solar installation?''** Thinking through your goals during the initial stages of your project will help you identify the option that is best for you. For example, you may choose a different structure if your emphasis is on maximizing your return on investment rather than on simplifying the operational impact of the project. If you can't directly benefit from a tax credit, then you want to pick an option like third-party ownership that can pass that benefit through to you in your pricing. If your primary goal is being able to make ''green'' marketing claims, you will need to choose an option that allows you to keep the RECs associated with the project's output, and you will want to examine how that affects the economics of your project.

Selecting the Option That's Right for Your Business.

There are many options available for a business interested in on-site generation, even for one that is only interested in solar. Choosing from among the options requires consideration of the level of risk, amount of upfront cost, level of commitment, and savings, in addition to the long-term plans for the site.

A company that is interested in a high return on investment and is willing to risk its own capital to do so may opt to build, own and operate a solar project itself. This is best used by a company that can take advantage of the tax credit and is comfortable managing operation of the facility, including sale of the RECs. Once the facility is operational, however, the company will get the full benefit of the output of the power for use on-site. If the site is rented out, you may be able to sell the power to your tenants, depending on your state's submetering laws.

Companies that are unable to use the tax credits or are uninterested in putting up their own capital for an on-site facility also have options. For those with a good on-site solar location, a developer will install, own and operate the project while licensing or leasing the project footprint (rooftop, etc.) and access rights from the site owner. The site owner can then purchase the facility's power from the developer at a rate that is either fixed or subject to escalation over the term, which is typically around 20 years. This approach can insulate the company from most project ownership risk, although there is some risk that the fixed rate will not be such a good deal if utility power prices fall during the term. As further described below, in these deals, how the PPA allocates risks is an important consideration.

Even a company that does not have space for on-site solar can participate in a solar project in some states that have ''community solar'' or ''virtual net metering'' programs. These programs allow a company to receive net metering credits associated with a solar project at a different site. Typically, the company will then pay a portion of those credits back to the developer, resulting in a net credit against the company's energy costs. These projects avoid the inconvenience of having a project on the owner's site, but they come with the same level of commitment and the same risks in terms of pricing, unless the developer provides the company with a guarantee that it will achieve savings on an annual basis or over the term of the contract.

If you have property that is suitable for a solar project but are not interested in either developing the project yourself or purchasing its output, you may be approached by a developer interested in leasing your land. In that case, the agreement with the developer will be a relatively straightforward site lease. In addition to, or instead of, a fixed rent amount, the site owner may opt to receive royalty payments representing payments based on a portion of the system output. This allows the site owner to reap the benefit of the upside of a successful project, although it also results in the site owner taking some production risk.

All of these options assume that you own your building or land. If you lease your space, you can still do deals, but your landlord will have to be part of it. There are very large national corporations that do this on a big scale without owning either the solar generators or the real estate.

Choosing a Contractor to Get the Best Deal.

Particularly in states with strong incentive programs, businesses may find themselves facing developer sales pitches with varying levels of pressure. It may be tempting to accept the first ''too good to be true'' deal, but companies are advised to consider these transactions in the same way they would any significant capital projects. For example, there are different companies specializing in different ''flavors'' of deals. Just because an option is suggested by a developer doesn't mean it is the right option for your company. A sound approach is to determine what approach is right for your company and find a contractor that specializes in that approach. Getting multiple quotes is also advisable, as deals even for similar projects can vary widely. For a large enough project, issuing a request for proposals may be worth the time and effort, as it will allow the company to efficiently compare multiple bids for the same type of project.

In the end, as noted above, the key is to treat a solar project like any other significant capital project, regardless of the sales pitches promising ''huge savings at no risk.'' Pick an experienced contractor and check refer-

ences and make sure the contractor commits to a schedule.

Major Contracting Considerations.

As noted above, solar projects are long-term investments. If you opt to take power from a project through a PPA, the contract will be for 20 or more years. It is important to understand the contract terms involved and negotiate to make sure you are not assuming more risk that you are comfortable with, or at least that you are aware of the risk that you are taking.

In the case of a project that you will own, contract considerations are similar to those in any engineering, procurement and construction contract—for example, cost and change orders, timing of the construction and access and standards of care during construction. The contract will typically include a pass-through of manufacturer's warranties on the panels and inverters, as well as some warranty on the part of the contractor.

For any project, the issue of site suitability will be a consideration. Developers may want the site owner to take responsibility for determining whether a site is suitable, but the developer may be in the best position to make that determination. A typical agreement will include the ability to terminate the contract or adjust the price, with the site owner's signoff, if unanticipated site issues come up after the parties have signed an agreement for construction or a PPA.

As noted above, in longer-term deals, future plans for the site or your business are a consideration. Much can change over a 20- or 25-year term, and you will want to make sure you understand what happens if you decide to terminate early, close down operations at the site or sell to another company. If you are the host and not the owner of a project, you may be subject to high damages if you terminate or close down the site that include tax incentive recapture and the lost value of SRECs, in addition to your energy payments. The project owner will also want approval right for any transfer to another owner, although some will back away from this requirement if the new owner meets certain credit thresholds.

A PPA will typically address other issues or risk over the term of the contract. For example, how will the risk of a change in law that has an adverse effect on project economics be shared? What if net metering laws are changed and regulators attempt to impose those changes on existing projects, as recently happened in Nevada? If the project needs to be shut down for any period of time, will either party be responsible for paying liquidated damages to the other? The myriad of decisions may seem overwhelming, but the market has evolved to the point where reasonably standard approaches have been developed and can be customized to individual deals.

Participating in an on-site solar project can be a way to manage energy costs over the long term while supporting sustainability initiatives. As with any large capital investment, even when working with a developer who offers no upfront costs, it is important to carefully consider available options, risks and obligations before entering into a deal. But companies that do their homework and take care in selecting the type of project, the structure of the deal, and their vendors, can end up with a project that benefits their business and even may improve the value of their properties.

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