# PUBLICATION

## Part Two: Challenges in Solar Equipment Finance

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### Challenges in Solar Equipment Finance

### Part Two of a Two-Part Article

This article is the second in a two-part series exploring state law limitations on various methods of financing solar equipment. Part One (which appeared last month; see http://bit.ly/2cXaH5z) explored the reasons why distributed generation customers might choose loans, power purchase agreements (PPAs) or leases to finance their acquisition of solar energy or solar equipment. It also explored various state law limitations on PPAs. Part Two, herein, explores the laws in various states related to solar leases and the differences between solar leases and PPAs, as well as the implications of such laws on the financing industry and its customers.

**State Laws on Solar Leasing**

Leasing solar equipment to users of electricity could also potentially face legal challenges, although these types of challenges seem to be less common. See K. Kollins et al., "National Renewable Energy Laboratory, U.S. Dept. of Energy, Solar PV Project Financing: Regulatory and Legislative Challenges for Third-Party PPA System Owners," 19-20 (2010), available at http://bit.ly/2aE0HgL. Although it is not clear how many states' or localities' regulatory schemes could potentially subject lessors to regulation as utilities or electric suppliers, some states (including Georgia, Louisiana, and South Carolina) have passed statutes explicitly permitting solar leasing, within certain limited circumstances. See Official Code of Ga. Ann. § 46-3-60 et seq.; Louisiana Revised Statutes § 45:121; S.C. Code Ann. § 58-27-2610.

To the extent that lease payments are fixed and unrelated to the amount of electricity generated, a court is less likely to interpret the arrangement as a sale of electricity. See, e.g., SZ Enterprises, LLC at 468 (noting that leases are outside the scope of regulation). Accordingly, a solar lease is less likely to face legal challenge than a PPA in states that regulate the sale of electricity.

For example, the Florida Public Service Commission found that a proposed lease-financing of a cogeneration system at a manufacturing facility would not result in an unlawful sale of electricity or cause the lessor to be a public utility regulated under Florida law. See In re: Petition of Monsanto Co., Florida Public Service Commission, Docket 860725-EU, Order 17009, 1986 Fla. PUC LEXIS 36 (1986). The commission noted that the lessee's payments would be in a fixed amount throughout the term of the lease, independent of how much electricity was generated or any other operational variable, and such payments would be due regardless of facility outages. Under these circumstances, the commission reasoned that the facility was "leasing equipment which produces electricity rather than buying electricity that the equipment generates." Id. at p. 6.

Accordingly, in states where only entities engaged in the sale of electricity are vulnerable to challenge, a lease may be a viable alternative for many customers. Nevertheless, any ambiguity in the applicability of state utility laws to leasing could serve to deter financiers from operating in that state. Further, as discussed in Part One of this article, non-taxable entities — such as churches, schools, governmental entities, and nonprofits — cannot take advantage of the ITC tax benefits with either a lease or a loan, and so such entities are less likely to be able to obtain solar equipment in states where only leases or loans are an option.

**Comparison of Utility-Scale Vs. Non–Utility-Scale Solar Equipment Financing**

State law limitations on PPAs are primarily relevant to the financing of distributed generation solar equipment, rather than utility-scale projects. This result stems from the fact that utilities (subject to applicable state regulatory approval) can enter into PPAs with parties that own solar energy generating facilities. In fact, utilities are required to purchase renewable electricity produced by certain "qualifying facilities" pursuant to the Public Utility Regulatory Policies Act of 1978 and regulations promulgated pursuant thereto. See 18 C.F.R. § 292.304. Since utility-scale projects do not suffer from the limitations applicable to distributed generation projects discussed in this article, such laws limiting distributed generation financing tilt the market in favor of utility-scale projects. Indeed, according to the Solar Energy Industries Association, utility-scale solar has represented nearly two-thirds of the market over the past few years, and this trend is expected to continue in 2016. See http://bit.ly/2c8p0Ep.

Every financing transaction — whether a loan, lease, or other type of financing — depends on the customer's (and if applicable, the developer's) ability to demonstrate to the financier that the latter's investment of funds or capital will be repaid with the contemplated return on investment. A financier's credit decision is based on entirely different factors in utility-scale projects as compared with distributed generation projects. With respect to utility-scale projects, the revenue stream generated under a PPA is usually one of the key components supporting the borrower's ability to access credit.

In a common type of utility-scale financing, a developer or its subsidiary (often a special-purpose entity formed solely for the applicable project and commonly referred to as the project company) creates a plan to install a large array of solar equipment. The project company then enters into a PPA with a utility, in which the utility promises to buy all of the power generated by the solar array from the project company at an agreed rate per kWh delivered.(The PPA may also include an agreement to sell the Renewable Energy Certificates (RECs), carbon credits, or other environmental attributes generated by the project, or the project company may enter into a separate agreement with another entity for the sale of such environmental attributes, creating a separate revenue stream flowing to the project company.)

The project company then seeks funds or capital from an investor (through a loan, lease, or other structure), relying on the PPA (and any other revenue-generating agreement) to demonstrate its ability to repay the investor along with its contemplated profit. The financier typically requires the project company to provide financial models (with revenue and expense projections), showing how much excess cash the project will generate during the life of the investment, and will "debt-size" the transaction using a financial ratio to determine how much could be invested in the project based on the financial model. Ultimately, the financier's credit decision depends in large part on whether the project company is likely to receive sufficient revenue under the PPA and any other revenue generating agreements each month to allow the project company to make its loan or lease payments after taking into account expenses.

The project companies in utility-scale projects can enter into PPAs with utilities without running afoul of state laws, because such project companies are not selling at retail to ultimate consumers. (However, applicable state regulatory schemes may require the applicable regulatory authority to approve such contracts.)

The legality of entering into PPAs with electricity consumers is of concern only to distributed generation customers wanting to install solar electricity on their property and finance it by entering into a PPA with a third-party financing entity that is not a utility. (Note that although some utilities provide on-bill financing for certain energy efficiency improvements, this type of utility-provided financing is not commonly offered for solar equipment. See B. Speer, "National Renewable Energy Laboratory, U.S. Dept. of Energy, Residential Solar Photovoltaics: Comparison of Financing Benefits, Innovations, and Options," vi, 16-19 (Oct. 2012), available at http://bit.ly/2cBPAVS.)

If essentially the same financing structure were used in a distributed generation project, state laws prohibiting PPAs would scuttle the transaction. For example, one common type of distributed generation project occurs in the commercial context when a project company enters into a PPA structure with a manufacturer, city, school or other large, distributed-generation customer to build a solar generation facility to provide power to satisfy the customers' electricity needs.

The customer may prefer this structure, rather than a loan, so that it can outsource all responsibilities for construction, maintenance and operation of the system. In addition, if the customer is a school, governmental entity or other entity that does not pay taxes, it may prefer this structure because it is the only way to take advantage of tax incentives available for solar equipment. In order to finance the installation, the project company may wish to enter into a loan, sale-leaseback, or other financing arrangement with a financier or investor. In such a case, the investment of funds or capital provided to the project company would be secured by its PPA with the distributed generation customer, and the PPA would constitute the credit support for the project company's obligations. However, the contract between the project company and the end-user of electricity would be illegal or of questionable legality in states that do not clearly allow PPAs between non-utilities.

The unfortunate result is that this common and popular structure that is available in transactions involving PPAs with utilities, is not available for distributed generation projects. This result is particularly troubling given the potential growth expected in distributed generation facilities, and the important role that the equipment leasing and finance community could play in this blossoming industry.

**The Revenue Stream**

In both the distributed generation and the utility-scale financing structures discussed above, the revenue stream from the PPA provides a critical component of the credit support for the financier's lease or loan to the project company. The difference between the two scenarios is only the identity of the parties to the PPA; in the utility-scale scenario, the PPA is between the project company and a utility, while in the distributed generation scenario, the PPA is between the project company and the ultimate consumer. In some states, this mere change in the identities of the parties means the difference between the legality or illegality (actual or potential) of the structure.

Where PPAs are not allowed, it is much more difficult to finance a project that is intended to satisfy only the property owner's or occupier's own electricity needs. If the ultimate user of the electricity takes out a traditional loan, the bank or other financier cannot take the ITC or tax depreciation benefits, because it is not the owner of the system. In that situation, or a situation where the financier enters into a lease with the customer that is not dependent on the amount of electricity actually generated by the system, the customer's payments could be higher than they would be with a PPA.

Accordingly, state laws that frustrate PPAs favor utility-scale installations over distributed generation. As will be discussed below, these rules also provide entry barriers to financiers who are sufficiently comfortable with the technology to lease or lend based on a PPA structure favored by many customers for the reasons outlined above.

**Implications of State Law Limits on Financiers and Customers**

Creative equipment leasing and finance companies often seek to provide innovative solutions that will appeal to particular niches of customers. For example, it is common in the industry to enter into transactions that are “leases” in form, but loans in substance. The industry is so creative that items like the off-balance sheet loan

(synthetic leases) have been used. Consider, for example, “dollar out” leases, TRAC leases, First Amendment Leases, and lease-to-service contracts, just to name a few.

In an efficient market, equipment leasing and finance companies may have a better ability to calculate certain risks and to bear those risks as compared to certain segments of consumers, and should be able to offer that service to the market. With respect to solar equipment, however, laws in some states limit the ability of equipment leasing and finance companies to innovate customer-oriented solutions. If a finance company were to tie the amount of lease payments to the amount of power generated, as an accommodation to a customer that wants the finance company to bear the risk of the equipment generating less power than expected, a court might consider the “lease” to be, in substance, a PPA.

Accordingly, the transaction could be vulnerable to challenge in jurisdictions in which the legality of PPAs is ambiguous, or illegal in jurisdictions that prohibit PPAs. Similarly, a developer may be unable to obtain investors through structures that depend upon having a PPA with an end-user. Such a result is ironic, given that state regulatory laws are ostensibly designed to protect consumers of electricity, but because of these laws, the model that poses the least risk to consumers is less available than models that shift risk away from financiers and onto consumers.

Where the legality of alternative financing mechanisms is unclear, middle-market (and eventually small-ticket) financiers that could otherwise offer these options are deterred from operating in those states. In the states where such financiers do operate, the patchwork of different laws and regulations among the states also results in higher costs for financiers to offer products in multiple states, because of the added costs of compliance. These inconsistencies between various state laws create market inefficiencies, because solar finance companies cannot operate consistently across state lines. See S. Bolstad, “Your Local Solar Panel Store: Developing State Laws to Encourage Third-Party Power Purchase Agreements and Distributed Generation,” 99 Minn. L. Rev. 705, 707 (2014-2015).

As a result, distributed generation customers have less access to credit markets, and fewer are able to install solar equipment. Although many factors influence the overall penetration of distributed solar generation, states that do not clearly permit third-party ownership tend to lag behind in installed distributed solar capacity. (For further discussion of the link between state laws permitting third party ownership and penetration of solar installations, see J. Farrell, “Importance of Third-Party Solar to Kickstarting a Solar Market,” CleanTechnica (Mar. 3. 2015), available at http://bit.ly/2clgyxw; and G. Ryan, “Throwing Shade: 10 Sunny States Blocking Distributed Solar Development,” Center for Biological Diversity (April 2016)). In addition, the equipment leasing and finance industry, that has shown itself to be a very creative and important component to market liquidity, has barriers to entry that can inappropriately slow the infusion of funds or capital into this important space.

**Conclusion**

As long as a person can pay out of pocket or obtain a loan for the costs of solar equipment, the law does not interfere. If the same person needs or wants an alternative financing mechanism, however, such alternatives are not available in some states because of broadly written utility monopoly laws that could or would regulate the providers of such financing as a utility. These restrictions in the free market are limiting access to credit markets, reducing consumers' choices.

Although loans, leases, and PPAs are all simply different methods of financing the up-front costs of solar equipment, in many cases courts distinguish between the legality of financing structures based on whether the payment amounts are fixed or vary according to how much power is generated. This result is not justifiable, given that the differences between these methods of financing are differences in form rather than substance. State law regulatory schemes that favor structures using fixed payments over payments based on the amount

of electricity generated tend to shift more risk to the customer — the opposite of the policy goals that such regulations were presumably intended to accomplish.

Indeed, the fact that such alternative financing mechanisms have been caught in the web of regulation seems to be entirely unintended, as the third party ownership model was developed only in recent years, long after most of the laws applicable to utilities were written. It seems that utility monopoly laws in some states have had apparently unforeseen consequences.

Legislative action is needed, in order to increase access to solar equipment financing across the nation. States that have not clarified the legality of PPAs and solar leases can increase citizens' financing options by enacting legislation exempting PPAs and solar leases from regulation. Better yet, the development of uniform state legislation (similar to the Uniform Commercial Code and other such model statutes) would increase availability to financing by encouraging uniformity among state laws, thereby simplifying compliance. The important issue of whether utility monopoly laws apply to financiers of self-generators should not be decided on an ad hoc basis by state courts and regulatory commissions, based on interpretations of laws that were developed prior to the modern solar era.

In order to unlock the potential of renewable energy, states must remove barriers to its adoption. Improving access to financing for distributed generation solar projects has the potential to unleash the power of private capital at a much larger scale and expand the availability of distributed generation solar energy across the nation.