Putting U.S. Solar Financing Structures in Perspective

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There has never been a better time for new investors to enter the U.S. solar market. The specter and uncertainty of tax reform is behind us, and the enactment of the Tax Cuts and Jobs Act (P.L. 115-97) has reduced the investment appetite of many traditional equity investors. There is opportunity for new players to emerge to help fill gaps in the capital stack. There is a bit of a learning curve, however, because U.S. solar financing structures are different from those of most other industries. This article helps put the relative risks and benefits associated with these structures in perspective.

The three primary solar financing structures are called partnership flips, inverted leases, and sale-leasebacks.

The key driver for each of these structures is the efficient allocation of tax benefits that the U.S. government provides for solar projects. The two principal benefits consist of a 30 percent investment tax credit based on a project’s cost (subject to a step-down for projects that begin construction after 2019), and the ability to depreciate that cost on an accelerated basis.

Not everyone can make use of these tax benefits. Aside from tax capacity limitations, special tax rules make it harder for wealthy individuals, S corporations, and closely held C corporations (that is, a corporation in which five or fewer individuals own more than half of the value of the stock) to claim solar tax credits and accelerated depreciation. Developers can rarely make efficient use of tax credits and depreciation, so they bring tax-efficient investors (called “cash equity investors”) into the transaction in exchange for capital contributions for the project. Tax equity typically accounts for less than half of a solar project’s financing, so in addition to (or in lieu of) finding debt financing to complete the capital stack, developers often bring in cash-focused investors (called “cash equity investors”) who contribute capital in exchange for a large chunk of the project’s cash flows. Virtually anyone can be a cash equity investor, but any foreign or tax-exempt cash equity investor would need to participate through a taxable U.S. subsidiary to preserve the tax-equity investor’s ability to claim the full value of tax credits and accelerated depreciation available for a project.

Timing is important. Subject to a limited exception for sale-leaseback financings, tax equity investors must fund into a transaction before the project goes online. Cash equity has more flexibility. We have seen cash equity enter into transactions before tax equity, after tax equity, and even several years after a project is in service, where they effectively refinance the developer’s initial capital outlay. However, the earlier cash equity enters, the better chance it has to strike a favorable deal. Tax equity investors are loath to amend deal papers that have already been signed, particularly if the underlying transaction closed months or years earlier.

The structure that is ultimately used depends on several different variables, but the choice is usually based on a combination of the tax equity investor’s institutional preferences and the developer’s long-term goals. Cash equity investors are interested in — you guessed it — maximizing cash. That motivation is constant regardless of structure.

This is how the structures work.

Partnership Flip

Partnership flips are the most common structure in the U.S. solar market. They are also the closest to what one might see in other
industries, such as real estate. The idea is to use the flexibility of the partnership structure to send the bulk of the tax benefits to the partner who can most efficiently use those benefits, while sending most of the cash returns from the project to one or more other partners.

In a typical deal, the developer either contributes a project or sells it to the partnership, and the tax equity investor contributes cash. The tax equity investor is typically allocated 99 percent of the tax benefits and some portion of the cash (usually around 30 percent or less, depending on the project) until the tax equity investor reaches a target yield or a fixed date passes. The fixed date will be no earlier than five years after the project is put in service. Once tax equity reaches the applicable benchmark, its share of tax items will decrease (usually down to 5 percent), along with its share of cash. The other partners will get the bulk of the cash for the remaining life of the partnership.

Cash equity investments can take several different forms. A cash equity investor might participate as a third partner of the partnership with tax equity, or it might form a second upper-tier partnership with the developer, in which case that second upper-tier partnership’s cash would be split between the developer and cash equity in whatever ratio the parties decide. We have also seen the opposite, in which cash equity forms an upper-tier partnership with a tax equity investor, and essentially sits as a placeholder for tax equity in a lower-tier partnership with the developer.

There is no cost to the formation of a partnership if all the partners make capital contributions. However, there would be taxable gain to the developer if the developer sells a project to a partnership with tax equity, or if the tax equity investor acquires its interest by purchasing it from the developer.

The basis used to calculate the tax credit is the partnership’s cost to acquire or produce the project. If the project is purchased, the credit-eligible basis is the purchase price of the solar-generating equipment and other property necessary for its operation. If the project is contributed to a partnership by a partner, rather than sold, the basis is the contributor’s cost. The depreciable basis of the project is reduced by half of the credits claimed by the project’s owner.

Partnership flip structures are largely dictated by IRS safe harbor rules that were issued for wind projects. Under the safe harbor, if the partnership is structured in a certain way, the allocation of credits by the partnership to its partners will be respected. There are also general tax requirements that come into play. The partnership must be respected as a partnership for tax purposes, the tax equity investor must be treated as a partner in that partnership, and the tax allocations must be structured consistent with section 704(b) and its regulations (principally the requirement for substantial economic effect).

The IRS has adopted the position that the safe harbor rules only apply to wind projects, but in the absence of solar-specific guidance, the solar industry almost universally follows the wind rules anyway. The solar industry’s approach was confirmed to an extent in an internal IRS legal memorandum made public in 2015 (ILM 201524024) in which the IRS National Office analyzed a transaction using the criteria from the wind safe harbor, even though the memo formally concluded that the wind safe harbor did not apply to solar projects as a technical matter.

Among other rules, the safe harbor requires the tax equity investor to invest at least 20 percent of its total expected investment by the earlier of the date it comes in the transaction or when the project is placed in service. Moreover, the total expected investment must be at least 75 percent fixed. The safe harbor also requires the tax equity investor to receive no more than 99 percent of the tax items, and no less than 5 percent of such items. (There are no similar restrictions on cash sharing.) Further, the developer can have an option to buy the tax equity investor’s interest at fair market value, but the tax equity investor cannot compel the developer to buy its interest. This is at odds with other IRS guidance for historic tax credits, which often use the inverted lease structure.

One of the issues with which tax lawyers wrestle is whether the transaction is merely a loan or a sale of tax credits in partnership clothing. The safe harbor rules go a long way towards making people comfortable that the structure works, but deviations from the safe harbor must be closely analyzed. If, for example, the tax equity investor has a put right and the developer has a call right during the same period, the chances of the tax
equity investor remaining in the deal after the exercise period are slim. If there is a relatively fixed exit date for the tax equity investor (and it is reasonably likely to occur), it is also at least arguable that the transaction could be recharacterized as a loan, depending on the other facts of the transaction.

Tax equity investors in partnership flips typically want indemnification for lost tax credits and depreciation, but only if there is a breach of a representation or covenant. Developers are usually asked to represent that the project’s basis for tax credit purposes is its true FMV. Losses due to structural risks, such as noncompliance with the safe harbor rules, are typically excluded from a developer’s indemnification obligations.

From the perspective of the cash equity investor, the most important structuring consideration is how to get — and keep — cash. When the tax equity flip is keyed to a specific investor yield, the tax equity investor is often permitted to “sweep” cash that other partners would normally receive to offset a delay in achieving its target yield. The sweep can be up to 100 percent unless the developer (or cash equity investor) can negotiate a lower percentage. Similarly, the tax equity investor may have a cash sweep for post-funding changes in tax law that adversely affect its IRR. These kinds of sweeps became common in 2017, before tax reform. The market is still settling on the scope of these provisions post-tax reform, but most tax equity investors want to keep the protections their lawyers worked so hard to negotiate in 2017.

A cash equity investor’s exposure to cash flow interruptions depends on its position in the structure. If the investor is a partner of a three-partner partnership with the tax equity investor and the developer, cash sweeps will generally be limited to the developer’s share of cash unless the cash equity investor is directly responsible for the loss. If the cash equity investor partners with the developer in an upper-tier partnership, the cash equity investor is more exposed because all its money is really coming from the developer’s share of the lower-tier partnership with the tax equity investor. It is critical for a cash equity investor in an upper-tier partnership with a developer to have a complete understanding of the developer’s lower-tier deal with the tax equity investor. Similarly, we often see cash equity investors buy all (or nearly all) of the developer’s partnership interest in a secondary market transaction. In this scenario, the cash equity investor needs to be fully comfortable stepping into the developer’s shoes in the original deal. It is very difficult to get tax equity investors to re-trade once a transaction is fully baked.

**Inverted Lease**

Inverted leases are another common financing structure. Unlike partnership flips and sale-leasebacks, in which the project owner is the only party entitled to tax benefits, a special rule for inverted leases allows the lessor to pass the credit on to the lessee. The lessee claims the credit based on the project’s FMV (as opposed to the project’s cost). Instead of reducing the depreciable basis of the project by half of the investment tax credit amount, the lessee recognizes income (sometimes called “reverse depreciation”) equal to half of the tax credit amount ratably over five years. The lessor is entitled to all the depreciation on the project’s unreduced basis.

There are two types of inverted leases: a basic structure in which the developer is the lessor and leases the project to a tax equity lessee, and an overlapping ownership structure in which the lessee is a minority (typically up to 49 percent) owner of the lessor.

One of the benefits of the inverted lease is that it allows the parties to carve up the tax benefits and allocate them among the parties who want them the most. For example, if a tax equity investor only wants tax credits and the developer has an appetite for depreciation, the basic inverted lease structure makes more sense than a standard partnership flip. The overlapping ownership variant would be an improvement over the basic structure if the parties want some of the depreciation to go to the tax equity investor.

Another advantage of the inverted lease is that the tax credit basis step-up to FMV is “free” in the sense that entering a lease is not a taxable event to the developer. The step-up can have a tax cost to the developer in the other structures because the sale of a project to a flip partnership or to tax equity investors in a sale-leaseback is a taxable event for the developer.

Like partnership flips, there is no solar-specific guidance for inverted leases. The industry
largely follows guidelines for historic tax credit transactions (which use inverted leases but call them master tenant structures), and leasing principles from guidance for leveraged leasing transactions. These guidelines are conceptually like the wind partnership flip guidelines in that they try to put the tax equity investor more at risk than a lender would be. For example, like the partnership flip safe harbors, the tax equity investor needs to have at least 20 percent of its investment in the deal when it enters the transaction and 75 percent of its investment must be fixed. There are also some notable ways in which the historic tax credit guidance differs from the partnership flip guidance. One way is that the tax equity investor may have a right to put its interest to the developer for less than FMV, but the developer may not have a call option (that is, the exact opposite of the flip guidelines).

One of the key structuring considerations for inverted leases is that the lease must be respected as a true lease in the sense that it does not transfer tax ownership to the lessee. This might happen if, for example, the lease term exceeds substantially all the project’s useful life, or if the lessee gets the project for free at the end of the lease term. In the overlapping ownership variant, the lessor also needs to be respected as a partnership between the developer and the lessee, and the lessee needs to be respected as a partner of the lessor.

In terms of indemnities, tax equity typically expects complete coverage for lost tax credits due to anything other than a structural risk that it explicitly agrees to bear in the transaction documents. These excepted risks typically include issues like the lease being respected as a true lease and compliance with the safe harbor guidance.

The inverted lease structure typically requires the least amount of cash to be sent to the tax equity investor, so in most cases there is more money available for a cash equity investor or a lender. In that sense, this is a very attractive structure for a cash equity investor. However, there are relatively few tax equity investors that use inverted leases compared with standard partnership flips. Those that do tend to also be active in the historic tax credit market, where this structure is common.

Sale-Leaseback

A third common structure in the U.S. solar market is the sale-leaseback. As its name implies, it involves the sale of a project by a developer to a tax equity investor, who simultaneously leases it back to the developer. The tax equity investor’s basis for tax credit and depreciation purposes is the purchase price that it pays to acquire the project. The tax equity investor’s depreciable basis will be reduced by one half of the amount of the tax credits.

This is the only structure in which tax equity investors do not necessarily need to be in the picture when the project goes online. There is a special rule that permits it to still claim the tax benefits if the sale and leaseback transaction happens within three months of the project being placed in service. Both the sale and the lease still need to happen simultaneously. The extra three months make sale-leasebacks an attractive option for developers who are not able to find tax equity during construction or pre-construction. They get a limited second bite at the apple.

The developer will recognize taxable gain on the sale of the project.

A tax equity investor will receive rent for the term of the lease, and will be able to shield its income with the tax credit and depreciation benefits it claims as the project owner. Another benefit for tax equity is that it does not need to worry about complicated partnership tax rules that may limit its ability to absorb the project’s tax benefits.

Lease terms are typically 10 to 20 years. The developer often has a purchase option to reacquire the project for its then FMV when the lease ends.

In sale-leaseback transactions, the indemnity coverage typically extends to all tax benefits, except for any loss due to a fundamental structuring issue (for example, tax equity not being respected as the owner of the project for tax purposes). If the sale occurs after the project is in service, the developer will be the one to bear the risk that the transaction did not occur within the three-month deadline.

Of the three main structures, the sale-leaseback offers the least opportunity for cash equity. The structure provides 100 percent project financing, so there usually is not much incentive...
for the developer to partner with someone. We typically only see cash-focused investors participate in sale-leasebacks in a lending capacity.