SOLAR FINANCE EXPLAINED: PPAS VS. LEASES

Commercial finance options for solar have expanded greatly over the last several years, making the economic feasibility of solar even more attractive for private and public entities. In this brief, we will review the key differences between two financial mechanisms: the solar lease vs. the power purchase agreement (PPA).

SOLAR LEASE

Many companies opt to procure their solar system through a long-term lease. Leases can immediately reduce utility costs and lock in lower cost electricity for terms typically ranging from 7 to 10 years. A solar lease is a good option for long-term ownership when cash purchase is not. At the end of the term, the lessee typically has the option to purchase the system at a reduced cost.

POWER PURCHASE AGREEMENT

A solar power purchase agreement (PPA) is a financial agreement where a developer arranges for the design, permitting, financing and installation of a solar energy system on a customer's property at little to no cost to the customer. The developer sells the power generated to the host customer at a fixed rate that is typically lower than the local utility's retail rate.

EVALUATING RISK

One of the key differences between solar leases and PPAs is who assumes production risk. In a lease, the system lessee assumes the risk, since the cost of the lease is always consistent, whether or not the PV system is performing at optimal capacity. Loan and lease payments do not fluctuate with production; therefore, the risk of production is borne by the customer instead of the developer.

In a PPA, the production risk is completely borne by the system developer/investor, not the customer. If the system does not produce as expected because of weather, soiling or system failure, the customer will never be under water with a PPA. This is because the monthly payment obligation is tied to the production of the system. While the total NPV of the project may be reduced if the system produces less, you will never be at risk of losing money on the asset.

ACCOUNTING CONSIDERATIONS FOR SOLAR FINANCING

According to the FASB's Accounting Standards Update 2016-02, companies must move operating lease assets and liabilities onto their balance sheet in 2020. Publicly traded companies are already seeing this effect, as companies like Chipotle Mexican Grille and Pier 1 Imports have seen increases of more than 100% in reported assets . This major shift in accounting rules has the possibility of tripping up loan covenants, impacting the availability of future funds and affecting interest rates.

The off-balance sheet nature of PPAs will help companies' exposure when it comes to these accounting changes. In addition, with a PPA, the asset does not tie up a company's collateral. Since a PPA does not require a lien on the property, your exposure to PPA payments is much less than with a lease or loan. PPAs are also more valuable when you look to sell property because the obligation does not force an assumed increase in property that is subject to an individual's opinion.

OPERATIONS AND MAINTENANCE CONSIDERATIONS

Operations and maintenance (O&M) can be managed by CalCom Energy, but when it comes to risk of technology, CCE cannot control that. CCE is proud to use the highest quality equipment in the PV industry, but any technology carries with it long-term exposure for the 25-year life of the system. With a PPA, this long-term exposure is borne by the investor of the system. The O&M costs are also the investor's responsibility and any increase in O&M rates due to inflation, increased regulation or deterioration of the asset is at the expense of the investor.

LEASE BENEFITS:

- Customer has lower monthly payment obligation when the system performs optimally
- As of 2018, leases are off balance sheet
- Shorter obligation period

LEASE DISADVANTAGES:

- Monthly payment obligation regardless of system production
- As of 2020, leases will be moved on balance sheet
- Additional collateral required
- Responsible for O&M + Insurance + Module Washing + ongoing system optimization costs
- Customer is responsible for CCE Energy Services payments
- Customer must handle all warranty issues

PPA BENEFITS:

- Customer only pays for what is produced by the system
- All equipment, weather, warranty risks are borne by PPA Provider
- PPA will continue to be off balance sheet since there is not a foregone payment obligation
- Buyout options in 5-25 years
- PPA Payments correlate directly to bill savings

PPA DISADVANTAGES:

- Monthly payment potentially higher if system produces as expected
- Higher buyout options