

Solar success: Understanding the operations and maintenance associated with a solar PV system

April 02, 2015 - Owners Developers & Managers

Like hundreds of businesses around Massachusetts, you've realized the benefits of renewable energy and have made the decision to install a solar PV system to help reduce your energy costs and create a new revenue stream through solar renewable energy certificates (SRECs). That's great!

The average solar system has approximately a 25-year lifespan, and new technologies are helping to lengthen that. So just like the maintenance you'd need on a building over that span of time, you're going to want to make sure you understand the operations and maintenance associated with a solar PV system.

Operations and maintenance programs generally have three goals: production optimization, revenue management and system maintenance (preventative and corrective). After a customer invests in solar, it is critical that the system meets ROI expectations to reduce energy costs and generate SRECs, which will help pay for the system. In addition to reducing or eliminating electricity costs, the more kilowatt-hours a solar system produces, the more SRECs the owner will receive. Given the high cost of electricity, and uncertain costs in the future, solar has been a great investment for businesses.

Let's take a look at five areas of service your solar provider should provide to meet these goals: System and production monitoring:

A real-time web based monitoring system measures the production of electricity and sends an alert if a problem is detected. Having visibility into the system's energy production allows the solar developer to track the system performance and spot any anomalies. Many systems include visual displays of a company's daily/weekly/monthly/annual energy generation and cost savings, making them valuable green marketing tools.

Annual preventative maintenance:

The solar services provider will conduct a site visit to complete an exhaustive inspection of all of the system's mechanical, electrical and PV components. In conjunction with this service, project developers usually provide a repair service that will quickly diagnose issues and correct problems to mitigate system downtime.

SREC management:

Solar offers significant financial benefits through SRECs. A solar project developer can help you manage this process, providing performance evaluations, assistance with filing to the state Department of Energy Resources, quarterly and annual reporting, tracking and trading, and payments.

Net Metering Support:

Net metering is the process of receiving credit for electricity produced in excess of what is needed

on site. An experienced project developer will work closely with you to track production to insure Net Metering credits are fully applied. Additional support would include Schedule Z preparation and support, as well act as a liaison between the utility and the customer.

Corrective maintenance:

Corrective maintenance includes such work as making repairs, restorations, and improvements not covered under scheduled maintenance. Occasionally issues arise that are not covered as part of scheduled maintenance, such as warranty claims. The solar project developer can help you resolve these issues quickly.

You've made a big investment in solar, and that investment will reap rewards for years to come. An experienced solar services provider can help you manage production optimization, revenue management and system maintenance over the life of the system.

Steve Bianchi is a partner and senior vice president and general manager of customer services at Solect Energy Development, LLC, Hopkinton, Mass.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540