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November 22, 2016

At-A-Glance

The Four Phases of a Commercial Solar Panel Installation

When you're first investigating the possibility of implementing a commercial solar installation, the future looks bright. It's exciting to think about the energy cost savings and the environmental and social benefits this clean, renewable resource will bring to your organization. But that's someday, not today.

At this point, having made a commitment to go solar, you're probably asking "Now what?" Here's a quick look at the answer.

Your solar panel installation process will vary in time and complexity depending on the type you're planning. For example, rooftop solar panels installed on commercial buildings take significantly less time than field or solar carport projects. Whichever type of solar power solution you choose, construction will follow the four basic steps outlined below.

1. Due Diligence

Every commercial solar installation project requires planning in advance to ensure a smooth construction process. This due diligence can include:

- The physical evaluation of the proposed site—whether it's a structural evaluation of a building or in-depth topographical and geological surveys of a proposed worksite.
- Legal review of title reports and other records to confirm your right to build.
- Determining where your new system will hook into the power grid when completed.

2. Engineering and Commercial Solar Panel Design

In the second phase, conceptual ideas and initial plans are formalized. Early Design Drawings show where the solar panels for your business will be placed and help lock-down exactly what will happen once construction begins. You can expect to review Permit Drawings, used to obtain various building permits. Toward the end of this phase, you'll also review Construction Drawings, which are the blueprints for all the commercial solar installation work to follow.

3. Construction and Solar Panel System Commissioning

Depending on the type of project, construction can take as little as 5 weeks for simple installations, and up to 12 weeks or longer for more complex projects. Expect some periodic interruptions to your organization's daily routine during construction. For example, you may need to find alternate parking options or accommodate temporary power shutdowns. These inconveniences can be minimized with a well-thought-out project plan.

After construction comes commissioning—the light at the end of the tunnel. It's the final "okay" where the solar provider confirms that your new commercial solar installation was built according to plan and operates within acceptable parameters, and the utility grants permission to operate.

4. Solar Panel Operation and Maintenance (O&M)

A properly maintained and serviced commercial solar installation can provide decades of clean, reliable energy—and it begins on the first day your new solar system comes online. This final phase launches the decisions outlined in your original contract that specify your organization's level of involvement in O&M going forward. Your solar equipment provider will likely offer a range of assistance from basic annual inspections and monthly performance reports, up to the gold standard of O&M: a performance guarantee.

For a more comprehensive look at each of these steps, please see our business brief: What to Expect When You Go Solar.