

Photovoltaic (PV) solar systems: Get the facts



Factors to consider when responding to an LNG incident:

General facts

- PV systems are a growing aspect of American energy infrastructure.
- Some PV systems in the U.S. may **NOT** be code-compliant.
- Solar panels are not designed to withstand extreme conditions, such as direct flame contact.

Operational facts

- A lightweight tarp will not produce sufficient opaque coverage to prevent power generation. Use **ONLY** tested opaque salvage tarps that frustrate light transmission and prevent power production.
- Both commercial and residential solar arrays pose a hazard to first responders.
- The presence of solar power systems may alter fire or structural conditions and lead to an unexpected collapse.

Electrical hazards

- Even though a control switch may shut down power going to an inverter or into the grid, voltage remains in the system.
- PV arrays can produce electricity even when the sun is not shining on them.
- A shattered PV panel will produce voltage and transmit energy.
- Both older and newer PV arrays and power storage units have the potential to injure first responders.
- Each PV panel may have its own micro-inverter.
- **NOT** all solar power systems can be controlled in the same way. Some systems have a single control point while other have multiple shutoffs and inverters.
- Most incidents involving PV systems involve arcing and/or power surges.