

Booming Solar Market Presents Risk, Opportunity



Solar panels, installed on the rooftops of a growing number of commercial and residential properties, promise to dramatically save energy costs as key contributors to the renewable energy revolution. In the U.S. alone, solar, or photovoltaic, capacity exceeded 25 gigawatts for the first time in 2015—enough energy to power more than 5 million homes. And in 2015 new generating capacity from solar exceeded natural gas for the first time, second only to wind power in terms of growth.

With this growth comes the increased need to manage the risks of solar power generation. Like many innovations, solar panels present some potential threats to property owners—the most significant of which is fire.

“The risk comes from a combination of a new ignition source and new combustibles,” says Jim Breitreitz, Executive Technical Director of Risk Engineering for Zurich North America. “Electrical fires are one of the most common causes of loss in general, and a lot of solar installations, which are very complex electrical systems, are put on roofs that aren’t necessarily designed with that fire risk in mind. Additionally, installations increase the combustible loading of the roof because solar panels contain a significant amount of plastic. The biggest impact may be the way the solar panels encourage horizontal fire spread across the roof, under the panels.”

In addition, solar panels can significantly add to the weight load carried by roof support systems—of particular concern in retrofitted solar installations. Panels can also trap debris and snow and make snow removal more difficult. And if a fire does occur, the panel placement may complicate the firefighting process.



“Firefighters typically will not go on a roof that has a solar panel installation if that roof is on fire because they are concerned about the risk of electrical shock,” Breitreitz says. “Water and electricity don’t mix, and the only way to shut off the electricity generated by solar panels is to wait for the sun to go down.”

Property owners and insurance brokers alike should be aware of these risks and ensure that solar panels are installed as part of an integrated system that considers increased weight and fire load. They also

must evaluate the ongoing maintenance of solar-generation systems, as well as increased building maintenance costs, including the regular replacement of flat-roof surfaces.

Working with a company that understands these hazards and mitigation strategies can offer a much-needed risk management solution.

“An important part of Zurich’s Promise Delivered strategy is our commitment to our customers to provide innovative, proactive solutions to emerging risks such as solar-generation systems,” says Breitreitz. “Customers and brokers need the best information available when making strategic decisions that can significantly impact total cost of risk.”

“Some roof deck installations perform better than others, and we can help brokers and property owners make the best-informed decisions in both building construction and solar panel installation,” Breitreitz says. “We have the risk management and loss control experience in solar and other types of renewable energy, and can provide customers with information on building codes and research from NFPA and others.”

The rapid pace of solar power construction is expected to continue, with the industry poised to double the amount of installed capacity in 2016. This presents tremendous growth opportunity.

“Solar is a fantastic technology that is only beginning to tap into its full potential,” says Breitreitz.

“Panels can be installed safely on a roof or in a yard, but the installation has to be done right,” he adds. “We bring our experience to bear to help customers across the globe anticipate and take steps to prevent a loss before it occurs.”



ZURICH®

To learn more about the vast portfolio of Zurich solutions and services available to help meet the risk challenges of a changing world, visit zurichna.com and the Zurich Literature Rack at zurichvlr.com

This is intended as a general description of certain types of insurance and services available to qualified customers through the companies of Zurich in North America, provided solely for informational purposes. Nothing herein should be construed as a solicitation, offer, advice, recommendation, or any other service with regard to any type of insurance product underwritten by individual member companies of Zurich in North America, including Zurich American Insurance Company, 1400 American Lane, Schaumburg, IL 60196.

Your policy is the contract that specifically and fully describes your coverage, terms and conditions. The description of the policy provisions gives a broad overview of coverages and does not revise or amend the policy. Coverages and rates are subject to individual insured meeting our underwriting qualifications and product availability in applicable states. Some coverages may be written on a nonadmitted basis through licensed surplus lines brokers. Zurich does not guarantee any particular outcome and there may be conditions on your premises or within your organization, which may not be apparent to us. You are in the best position to understand your business and your organization and to take steps to minimize risk, and we wish to assist you by providing the information and tools to help you assess your changing risk environment. Risk engineering services are provided by The Zurich Services Corporation.