



## Lightning Strikes the Discussion for Power Protection

### The Challenge

For a small waterfront community in Florida, hurricane season's side effects cause serious problems. Each year, homes in the community face devastating physical damage from storms, lightning strikes that can destroy electronics in an instant, and a high volume of power surges that can degrade equipment over time and dramatically shorten its lifespan. Regional dealer Millennium Systems Design has been serving this community for many years, and approaches lightning season with a whole-home protection solution to safeguard its clients' systems and equipment from the damaging effects.

Michael Barry, President of Millennium Systems Design, recalls a specific community that was plagued by surges and damage from lighting, "Whatever the root cause, this particular environment was prone to lightning strikes, and it was something the members of the community had to deal with frequently."

According to the Weather Channel, regional conditions make Florida a breeding ground for thunderstorms. Data collected by the National Oceanic Atmospheric Administration (NOAA) on the average number of cloud-to-ground lightning flashes per square mile each year between 1997 and 2011, ranked Florida as the number one lighting-prone state, with 1,414,284 lightning strikes per year and an average of 24.7 strikes per square mile. Barry commented, "When lightning season comes around here, people get scared."

Millennium Systems Design has identified several areas within close proximity that are prone to lightning strikes or high levels of surge activity. But Barry noted that his clients are often unsure of what types of products can protect against these lightning strikes and surges; "There's so many products out there available at the local box store that claim to have surge protection and will protect equipment. These items are usually under \$100 and when you compare them to surge protection solutions that cost more, it can be a challenge to get clients to understand where we, as installers, need to provide them the best solutions available to prevent problems down the road."

Millennium Systems Design had completed the installation in the Florida community just in time before the next storm season. "Lightning season came around and struck a tree in the yard of the home with our surge protection package installed," commented Barry. "The neighboring houses without any protection were not so lucky, and they got hit hard, having to replace almost all of the electronics in their home."

Barry believes that both customers and the industry can benefit from education about power anomalies and surge protection. "These [local box store] surge protectors provide an artificial sense of protection to customers," he said. "What clients don't understand, is that during all these storms and lightning strikes, their house is getting damaged little by little, and these disturbances are diminishing the life and performance of their electronics prematurely."

**"The power supply to the home was so horrible because of the generator and the equipment providing service to the house..."**



## The Solution

Because lightning strikes and related issues are so prominent in this area, Barry researched surge protection methods and technology. “We’ve spent over two and a half years researching whole house surge protection in Florida where we have some of the worst lightning strikes,” said Barry. “Over the past several years, we’ve built up a whole house surge protection center based around SurgeX equipment.” Millennium Systems Design commented that those types of installations are growing in popularity and that they’ve completed 6 or 8 of them within the past 6 months. Barry explained, “The program consists of multiple parts from high-voltage surge protection, outside protection for wires, and then bundling all the electronics within the house with SurgeX protection.”

“Out of this small cluster of homes, we convinced one of the homeowners to install our SurgeX based protection system with the understanding that it would mitigate over 90 percent of the damage caused by lightning strikes.” After having seen the damage that the lightning strike caused on their home but not their neighbor’s, others in the community saw the need for protection for their own system and have since had SurgeX installed.

The team at Millennium Systems Design believes that customer awareness on surge protection is an important component of establishing widespread protection against lightning strikes. “We need to get clients out of the mindset that they can spend \$50, and it will protect everything that the more expensive solutions can,” commented Barry. “SurgeX gives us a lot of the tools we need to explain why, in the long term, it will actually be the least expensive protection option.”

Jimmy Paschke, Manager, Residential Sales for SurgeX, agrees with Millennium Systems Design’ assessment. “This is something that’s plagued me the entire time I’ve worked in power management. When you say ‘surge protector,’ many homeowners immediately think of the product that could have picked up at a hardware store. They equalize the whole category down to this level and many think that ‘a surge protector is a surge protector,’ but that could not be further from the truth.”

## The Results

The experience with the Florida community was a driving factor in changing how Millennium Systems Protection approached surge protection. “Some dealers think of surge protection as an afterthought, born out of a particularly expensive home theater or automation project. We’ve created a system where surge protection is actually the leading factor,” stated Barry. “We’ve been able to bring on new clients by saying: lightning season is coming, and we want to protect you.”

Since altering their view on surge protection for their clients, Millennium Systems Design’s clients have a similar reaction to learning about the need for power protection. “For every house we install the surge protection package in, the reaction is always the same. We’ll call them and say: ‘Hey, we noticed you had lightning. How’s your house and how’s the system doing?’” said Barry. In most cases when they asked, Barry remarked that the customer hadn’t even thought about it. “A lot of times I feel like if we didn’t call them up, they probably would not have even noticed at all and that’s the whole idea. It’s working because you don’t notice it is working, it just does its job.”

SurgeX applauds dealers like Millennium Systems Design for stressing the importance for surge protection, especially in a vulnerable environment like the southeast. “We encourage dealers to lead their conversations with potential customers with surge protection in certain parts of the country, or with setting up a proper power foundation — which is something homeowners all over the country can benefit from,” added Paschke.

**“Dealers and their customers can experience as much as 40 percent down time due to power anomalies,” Paschke explained. “Lightning strikes only account for less than twenty percent of all power anomalies and eighty percent of the issues we encounter are caused by surges from within the installation environment. If we’re able to handle protecting our customers from lighting, we can handle the other eighty percent of the power anomalies they’ll face without a problem.”**

Millennium Systems Design has chosen SurgeX products to be an integral part of the whole home surge protection package they offer, Barry explained; “SurgeX is the only solution that allows our clients to get the best performance for the longest period of time, and you won’t get that with any other product out there that I am aware of.” Barry continued, “We use SurgeX equipment because it works. Millennium Systems Design been in business for 18 years, and I’ve been in the industry for 35. I pick products that work and make our team look good and not just to have a product. I have a passion for the product that we choose to install.”