Lighting Solutions

Protection of Parking Lot and Roadway Lighting – Why and How

This is the first segment of a series of articles to discuss the protection of lighting systems including Parking Lot, Roadway, LED, Florescent Lighting and Lighting Controls from surge and transient activity. This segment will focus on Parking Lot Lighting and Roadway Lighting failures due to surges and transient activity, as well as demonstrate a very effective proven solution.

Parking lot and roadway lighting present obvious benefits with equally apparent liabilities to the Owner if this lighting is not operational. In many cases, Owners spend a disproportionate amount of time and dollars continuously fixing the recurring problems with lighting, to spare themselves the liability, if for no other reason.

Most parking lot and roadway light poles are approximately 30' high (or higher). They serve effectively as a lightning rod and a direct path right into a facility for all kinds of transient activity, if not properly protected.

With this in mind, the vast majority of these pole lights utilize HID (High-Intensity Discharge) or, now more commonly used, LED (Light Emitting Diode) lamps, which incorporate *extremely sensitive* electronic ballasts or control circuits in each fixture housing. It is these electronic ballast or control circuits that need to be protected as well as the HID and LED lamps.

In most cases, the cost and concern of liability to the Owner alone is the motivating factor to continue to spend time and money on the 'temporary' fix, in hopes that it will last a while before having to begin the cycle of expenditures all over again.

Historically, one 'quick-fix' frequently chosen by many Owners, Contractors and Engineers alike is to simply provide a low-end 'lightning arrestor' on each pole to minimize the potential of multiple poles failing when only one has been damaged.

While the overall outcome of that approach has had mixed results over the years, these types of 'lightning arrestors' previously used have all but vanished from the market, as the new requirements of ANSI/UL 1449-2006 are much more stringent. Further, the updated National Electric Code forces all surge protective devices utilized in this type of application to be a 'Listed SPD' under ANSI/UL 1449-2006. In the past, other standards had been used for listing arrestors that had limited safety requirements. Often, these arrestors were rudimentary devices that left the Owners with a false sense of security and unexplained damage. While these additional and more rigorous requirements by the NEC and UL have had an impact on the manufacturers of SPDs, the user of the SPDs can be assured that these listed devices have undergone extensive performance and safety testing to aid in the protection of these

systems.

With the assistance of key clients who have experienced and documented damage to their parking lots year after year in Orlando, Florida (the lightning capitol of the United States), Surge Suppression Incorporated has created an unique 'outside-of-the-box' solution for these applications. Since its inception, this product and approach has yielded a dramatic reduction in downtime and repair costs. These savings go far beyond that of its predecessors (i.e. lightning arrestors & series 'in-line' type devices).

To learn more about this product type, application and the effectiveness of SSI's solution, please contact Mike Barton at mbarton@surgesuppression.com.

For additional information, contact your SSI representative or call 1-888-987-8877.