The Surge Suppression Incorporated facility wide Optimal Protection Network plan consists of various types of high quality surge protection devices strategically placed at key locations within the power, data and telecom systems. The type, number and location of devices is determined by a system survey of your facility and analysis of its unique requirements. This layered defense approach closes all available transient paths and reduces or eliminates the destructive effects of both external and internal transients. Even during the most severe conditions, your systems survive and you stay up and running!

1. Service Entrance Locations
The layered defense system begins at the service entrance. At this location, high energy transients are suppressed to levels that subsequent downstream TVSS devices can eliminate.

2. Distribution Panel Locations
This second defense layer provides further reduction and elimination of any transient energy remaining from the service entrance location during power system faults or severe lightning strikes.

3. Telecom & Data Circuits
Telecom, data and control circuits are extremely vulnerable to damage. Even very low level transients can damage I/O ports and take a system down. These mission critical circuits must be protected at all building entry points and at selected high risk internal locations.

4. Branch Panel Locations
Branch and sub-panel locations typically feed everything from general purpose loads to mission critical and high dollar value systems. These locations are very critical in the overall protection of your facility.

5. Dedicated Load and Point-of use Locations
Very often individual loads must be isolated from each other and from close proximity transient generating locations in order to function properly. Protection at these locations also mitigates the adverse affects of cumulative transient damage.

IEEE Std 1100 (Emerald Book), Section 8.6.4 Premise Electrical Surge Protection:
In addition to surge protective devices installed in the service entrance equipment, it is recommended that additional surge protective devices of listed Category “B” or Category “A”, as specified by IEEE Std C62.41-1991, be applied to downstream electrical switchboards, and panel boards, and panel boards on secondary or separately derived systems if they support communications, information technology equipment, signaling, television or other form of electronic load equipment.