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Date: February 28, 2013

To: John Elkins – Administrative Director of Facilities Management

From: Wayne Gibbs – Director of Facilities Management

RE: Five-year evaluation of Total Protection Solutions' surge suppression installation at Florida

Hospital Main Campus Central Energy Plant

During the design and construction of our Main Campus Central Energy Plant, our construction manager made the decision to replace the Hospital specified *Total Protection Solutions'* 'TPS' surge suppression with lesser quality protection manufactured by the switchgear company. This decision to substitute TPS manufactured surge protection products were based solely on a first-cost savings. TPS had proposed complete systems' protection for this project for a total investment of \$27,000. The switchgear manufacturer's surge suppression came in at a savings to the Hospital of approximately \$8,000. The Central Energy Plant construction was completed in November of 2005.

During the first 18-months of operation, our CEP experienced a high failure rate of motors, starters, drives, contactors and controls totaling over \$200,000. These extremely high electrical maintenance and repair costs do not include downtime of equipment, requirements to bring in temporary chillers or the increased liability exposure we assume as a 24/7/365 healthcare facility. It was at that time we made the decision to replace the existing surge protection devices with TPS filtering devices. The retrofit of the TPS filtering protection products took place during the second half of 2007.

The TPS surge suppression products have now been installed on main switchgears, motor control centers, chilled water pumps, distribution and branch circuit panels and have been operational for over five-years. I'm pleased to report that the total electrical maintenance costs for the CEP during the same five-year period is less than \$7,000. This represents a 96% savings to our electrical maintenance costs.

We have defined TPS as our sole source protection product for all new projects and we are steadily retrofitting their devices throughout each campus' electrical distribution system. Initially, we determined the need to protect electrical panels feeding sensitive electronic equipment however, we have since identified large dollars savings in maintenance costs and improved equipment reliability on every distribution panel we apply TPS technology. Additional benefits witnessed with the installation of TPS products are:

- Extended lamp and ballast life.
- Dramatically improved reliability for the Nurse Call systems, FACP, patient scanning equipment, HVAC air handlers, pumps and controls, elevator systems, biomed equipment and building automation systems.
- 3. Zero catastrophic losses to equipment due to lightning or Utility grid switching.

Operated by the Seventh-day Adventist Church The installation of *Total Protection Solutions'* surge protection products has a return on investment in months, not years. Their 30-year unconditional free replacement warranty meets or exceeds the design life of any application. In conclusion, I have not found any other product or service that will extend the design life of our systems and equipment while reducing overhead costs so dramatically. I only wish we had taken the steps to include TPS in our facilities years ago.

Now that we are beginning to build the Women's Center on the South campus we need to make sure TPS technology is part of design plan.

Thanks,

T. Wayne Gibbs - CFM

Director Facilities Engineering

WPMH