



THOR SYSTEMS, INC.

Site Survey: A Roadmap to Reliability

What common problems and related expenses are found in industrial facilities, airports, wastewater treatment plants, office buildings, hotels, hospitals, military installations, federal and state government buildings? All are subjected to the effects of poor electrical Power Quality (PQ). Nothing impacts profitability as instantly and dramatically as unscheduled downtime, equipment/system failures, or loss of availability.

A THOR SYSTEMS' *Site Survey* provides a valuable way to identify existing and potential PQ problems. During a *Site Survey* individual pieces of equipment and processes performing essential business functions are documented, including a review of their respective historical *Maintenance* and *Miscellaneous Expenses*. An analysis of these expenses, which defines the chronology of service calls, component failures, equipment downtime, system lockups/reboots/restarts, operating efficiencies and equipment availability, often provides the insight to determine poor PQ as the root cause of these problems. Electrical PQ problems cost United States industry over \$100 billion annually. Inexpensive components like a circuit card or logic chip failing can cause large financial losses. During a *Site Survey* information is documented and verified, defining the susceptibility of a facility, criticality of specific equipment/processes, as well as identifying potential Power Quality equipment needs.

Following a *Site Survey*, information gathered at the site is used to generate a report detailing the *Scope of Work* which includes an *Equipment Proposal* and a defined *Installation Guide*. The results of the survey are used to determine the appropriate Power Quality technology needed to solve the PQ issues found during the survey. A *Site Shield 3g Risk Assessment Spreadsheet* is the tool used for defining the specific equipment recommendations; a copy is attached for your review. These documents create a Roadmap to Reliability which is the means to help your company achieve its objectives by detecting and eliminating PQ problems affecting your business by providing:

Improvements in:

- Business continuity and operating efficiency
- Equipment/systems availability and longevity
- Customer relations due to improved on-time deliveries
- Equipment/systems connectivity

Reductions in:

- Maintenance cost (labor/materials-service calls)
- Equipment/systems downtime
- Equipment/systems repair and replacement costs
- Loss of production time and materials

Justification-Cost Savings/ROI:

Implementing the *Site Survey* recommendations can yield a 30-70% reduction of the maintenance and miscellaneous expenses related to the following categories:

- Electrical distribution/emergency/mission critical power equipment/MCCs, motor rewinding and replacements
- Building management/communication/HVAC/elevators and escalators/lighting control systems
- Office equipment (computers/servers, printers, copiers, etc.) security/fire detection and suppression systems
- Lost operating efficiency and consequences of late product deliveries
- Unnecessary equipment/systems lock-ups/reboots/restarts and the related material losses
- Poor equipment/systems availability and shortened longevity

The improved cost savings translate to a typical Return on Investment (ROI) of one year--often less than six months. The investment cost, including installation, is normally less than one-half of the sales tax of the equipment/system to be protected. As a reference, review the attached Case Study which documents a \$13,840 total investment, less than six months ROI, yielding a net savings of \$79,424 after being installed only 40 months.

Schedule a *Site Survey* to create a **Roadmap to Reliability** for your company to improve your maintenance expenses, equipment/process availability, overall operating efficiencies and ongoing enhanced profitability.

Thank you for your time and interest in THOR SYSTEMS, INC. We look forward to becoming your Power Quality partner and resource for surge protection equipment. THOR SYSTEMS offers products and services that can protect you from the more obvious external to the more frequent internal transient voltage sources. Feel free to give us a call at 804.355.1100, visit our Web site www.thorsystems.us, or send an email to sales@thorsystems.us if you have any questions or would like additional information.

Attchs. Site Shield 3g Risk Assessment Spreadsheet [TSI 067 SSH/r3]
Case Study [TSI 092/r4]