

#### Sustainability: G.E.S.P.E.R. System

G.E.S.P.E.R. systems decreases the amount of electricity being utilized, decreases the maintenance and replacement cost of motors and appliances, while at the same time keeping the output required by motors and appliances the same.

The reduced required electric currents utilized reduce the resources required to produce energy and the adverse emissions and pollutants caused by energy production. The reduced maintenance cost and increased life-cycles of electronic components reduce the resources utilized that are required to produce replacement parts and components, which in turn reduces pollution.

# Hospitals

 In 2010, as part of the American Recovery and Reinvestment Act of 2009, the USDA awarded funding of the installation of the G.E.S.P.E.R. system into the Fisher County Hospital District that services Northwest Texas.

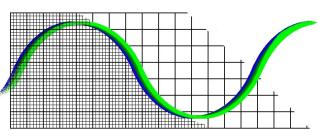
# Simple & Easy to Calculate Savings

Collection of some basic information is all that is required. Information can include:

- Most recent electric bill / authorization to create online access
- Or the last 12 months of electric bills

National Case Stur Restaurants: Starbucks (New York & Fl McDonalds (Las Vegas, N Domino's Pizza (8 Locatio IHOP (Weston, FL)	<b>kWh</b> Reduction 23% 26% 23% 15%				
<b>Industrial Facilities:</b> Bison Gear (St Charles, IL) Fulcrum Industries (Sacra Rochin MAF Industries (N	30% 15% 14%				
Government Buildings: City of Mayflower, Arkans Orange City, Florida	26% 44%				
<b>Agriculture:</b> Alliance Holsteins Dairy (I Maxim Egg Farms (Boling)	18% 17%				
Telephony / Internet / Satellite Downlink Center:Bay Creek Communications (Cape Charles, VA)12%					
<b>Chemical / Oil Well / Wa</b> Fullerton Oil Co (Fullertor Valley Creek Wastewater	17%				
Retail:Navarro Oldsmobile/Cadillac (Santa Fe, NM)19%Palm Beach Tan (Dallas, TX)22%					
Printing: Action Printing (Lubbock, TX) 2:					
<b>Office:</b> Law Office at 2302 Ave Q	(Lubbock, TX)	17%			
Perry L. Kontos844-364-3900PresidentPerry@GesperSystems.com					
John Crotty Partner	614-507-0399 John@GesperSystems.com				





# G.E.S.P.E.R. Systems

Green Energy Surge Protection & Energy Reducer

# **Energy Saving Solutions**



Distributed By Gesper Systems, LLC. Contact: 844-364-3900 www.GesperSystems.com **Product Test Results:** "...(The GESPER) power conditioning allowed a reduction in power required through all the tested load ranges ranging from roughly 2% reduction to 25% reduction. **The greatest benefit being shown in the unloaded condition (10.9%) and heavily loaded condition (24.8%).**"

- Northrup Grumman Newport News USA Defense Contractor

At Gesper Systems, we look for solutions to save businesses and property owners money on their electric consumption and much more. We operate with the guideline that saving money should be immediate and short term.

We only recommend products and services with a short term break even on investment period and with aggressive Return on Investment (ROI). One way we achieve this is through the utilization of the Green Energy Surge Protection and Energy Reducer system

(G.E.S.P.E.R.).



#### **The Problem: Dirty Electric Power**

"Dirty Power", "Dirty Currents", or "Dirty Energy" are defined differently by different people but essentially can be defined as an electric current that contains harmonics, unbalanced voltages, reduced power factor, surges and/or spikes. Dirty power is created by both outside building influences and is also created by components inside a building. Use of electricity that is dirty can cause an average utilization of 23% more energy, lower economic life cycles of electric components, and increased the maintenance cost to repair motors and appliances that are utilizing dirty power.

#### The G.E.S.P.E.R. System

**For the Layman:** The G.E.S.P.E.R. system works to condition the electricity in the electric system. By providing better quality electricity, motors will demand less kilowatts of electricity and will run cooler, which in turn lowers the kilowatts being billed by the electric company . At the same time, the economic life of motors, appliances and lights are extended.

# The G.E.S.P.E.R. System

#### For Electricians and Electric Engineers: The

G.E.S.P.E.R. units contain thermal metal oxide varistors, capacitors and proprietary technology which work to improve harmonics, balance voltage, improve power factor, reduce required current and provide harmonic filtering. The G.E.S.P.E.R. units were ETL approved UL 1449 3<sup>rd</sup> Edition SPD, ETL Tested VPR Rated 1200 Volts 100 KA RMS SCCR Rating.

### G.E.S.P.E.R. System Benefits

- A proven minimum 10% reduction in kWh usage
- Median (average) reduction in kilowatt hours is 19%
- Protects the electric system from surges
- Provides electric line protection from electric spikes
- Shields electronics from down line lightning strikes that transport through electric lines
- Improves performance of motors and appliances
- Can decrease maintenance cost of motors, appliances and lights

### **Immediate Savings - Energy Utilized**



GESPER units can save the user a proven minimum 10% reduction in kWh usage, with a median average of 19% reduction in kWh usage. The average kWh savings calculates at 20% annual ROI with a 14month break even period. The median 19% kWh savings that most

businesses experience calculates at 56% annual ROI with a 16 month break even on

investment.

#### **Energy Reduction & Reduced Rate**

The Energy Saving System together with a reduced rate per kWh can work to synergistically save even more. Just a \$0.01/kWh reduction together with the minimum 10% kWh reduction can increase the net savings to over 20%. Rate reduction together with kWh usage reduction reduce break even times and increase ROI.

Installation Results: "...66.5% annual ROI (Dublin Restaurant) ...68% annual ROI (Worthington Restaurant)...." - Jason Jiechun Liu, Founder and Owner J. Liu Restaurant & Bar (Installed at 2 locations)

### **Mid-Term and Long-Term Savings**

The G.E.S.P.E.R. system is essentially two systems in one. The system is a power conditioner that helps motors and electronic components operate with increased efficiency. This reduces the kWh utilized due to dirty electric currents. The system is also a ETL/UL approved Surge Protection Device that improves the life of the motors and electronic components receiving the power.

The conditioning of the dirty electric current provided by the G.E.S.P.E.R. system allows motors to operate at cooler temperatures than they normally would with dirty power being provided. Excessive heat causes rapid deterioration of motor winding insulation.

The ETL/UL approved Surge Protection that is provided by the G.E.S.P.E.R. system will help motors and electronic components operate at lower temperatures. Lower operating temperatures improve the longevity of the equipment life which in turn reduce the amount required for holdback in reserve accounts, reduce replacement costs and reduce maintenance costs.

MTBF Statistics									
Equipment	Actual Field MTBF			Increase in MTBF					
Туре	Prior to Install SPD			After Install SPD					
	Hours Years		Hours		Years				
Circuit Boards									
Single Sided	87,600	Hrs	10 Yrs	4,229,000	Hrs	483	Yrs		
Circuit Breakers									
General	105,120	Hrs	12 Yrs	1,337,550	Hrs	153	Yrs		
Power Switch	105,120	Hrs	12 Yrs	347,167	Hrs	40	Yrs		
Electric Motors									
Fractional HP	78,840	Hrs	9 Yrs	667,455	Hrs	76	Yrs		
Full HP	61,320	Hrs	7 Yrs	226,351	Hrs	26	Yrs		
Induction	35,040	Hrs	4 Yrs	138,000	Hrs	16	Yrs		
Fan									
Axial	175,200	Hrs	20 Yrs	539,000	Hrs	62	Yrs		
General	131,400	Hrs	15 Yrs	357,941	Hrs	41	Yrs		
Lamp									
Incandescent	8,760	Hrs	1 Yrs	26,280	Hrs	3	Yrs		
Florescent	20,000	Hrs	2.3 Yrs	52,560	Hrs	6	Yrs		
Regulator									
Thermostat	140,160	Hrs	16 Yrs	205,831	Hrs	24	Yrs		
Switch									
Toggle	262,800	Hrs	30 Yrs	3,673,429	Hrs	419	Yrs		
Established by the Department of Defense, created the "MTBF" (Mean Time Before Failure) statistics that dramatize the long term benefits of the SPD system.									

G.E.S.P.E.R. system offers a 10 year warranty and a \$2,000,000 product liability insurance policy.