





## GREEN SOLUTIONS

COMMERCIAL& RESIDENTIAL ELECTRICAL EFFICIENCY SYSTEMS

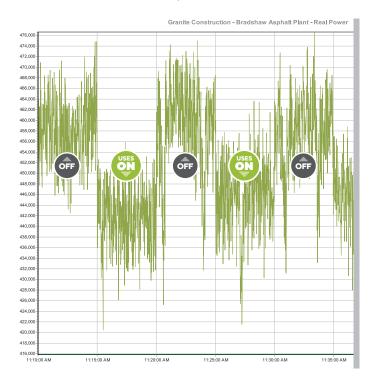
# SAVINGS

#### The Process

In order for a Power Shaver authorized dealer to provide an Energy Saving System proposal we will need specific information to determine the detailed electrical requirements and types of equipment unique to your facility. Upon completion of our Savings Evaluation we will then be able to generate a proposal with a performance guarantee. Upon installation, Power Shaver will verify the system performance through timed interval sampling electrical measurements and the actual electrical usage. A lease purchasing program for up to sixty months is available, allowing the savings to exceed the lease obligation. The first step is to contact Power Shaver now.

## **Real Results**

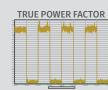
Below are actual Power Shaver installation verification recordings demonstrating kW demand and current reductions along with voltage and power factor increases when the USES<sup>®</sup> system is activated.

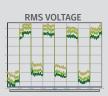


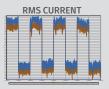
## Look Who's Saving with USES®



APPARENT POWER









DISCOVER WHAT YOU **COULD BE** SAVING!

Manufacturing

#### REDUCE DEMAND & CONSUMPTION

# SERVICE

### Who We Are

**Power Shaver** is USES<sup>®</sup> manufacturing's international distributor for its Universal Shunt Efficiency System. Our technology is UL, CSA, CE and GSA verified and has been installed in facilities around the world for over 28 years. Power Shaver offers a global network of authorized technology distributors that are specially trained to assess the specific needs of our customers and to apply the most beneficial Energy Saving System to reduce energy use and costs, while protecting against poor electrical conditions, surges and lags in power supply.

Power Shaver offers standard and custom-designed modular efficiency and protection systems that are installed in parallel to the electrical system to reduce the kW demand from the utility provider. Contact Power Shaver now to save in your facility.

> REDUCE CARBON FOOTPRINT

> > **INCREASE**

POWER

FACTOR

REDUCE GREENHOUSE

GASES

USES

AND T DESCRIPTION

USES

REDUCE HARMONIC DISTORTION

> CONVERT TRANSIENT ENERGY

> > PROTECT FROM SURGES

INCREASE EQUIPMENT LIFE

POVER SHAVER Energy Saving Systems.

PowerShaver.com

## PERFORMANCE

### How USES® Works

The patented USES<sup>®</sup> technology is a dynamic, passive, resonance-free magnetic field induction system that reduces kW demand and kWh consumption through five methods:



Magnetic phase balancing of voltage and current to safely reduce waste, demand, friction and heat in loads;



**Passive resonance-free power factor correction** to reduce the demand of reactive non-power currents;



Harmonic filtering of nonpower currents to reduce the billed kWh consumption and improve power quality;

**Transient energy conversion** through the surge protections self-healing magnetic chokes – energy above the operational voltage is absorbed, re-constituted, and returned to the customer as usable safe power;



**Power generation** via the USES<sup>®</sup> proprietary chokes: voltage and current are generated from each phase and injected into the adjacent phases as usable power, reducing kW demand and kWh consumption.

It has been found that our unique arrangement of chokes provides substantial reductions in real power usage for all applications. The immediate benefit is a verifiable reduction of electric utility bills. Additionally, equipment life is increased while maintenance and downtime are reduced.

The USES<sup>®</sup> technology employs self-healing magnetic chokes and metal oxide varistors as its two forms of surge and spike protection.

The USES<sup>®</sup> modular units are not custom-built for loads, but are specifically and intentionally placed throughout a facility according to the operational demands. They will help protect against damage from surges, sags and phasing, and are maintenance-free with an expected life of approximately 20 years. USES<sup>®</sup> is VFD or any control system compatible.

## See the Difference

Below are sample assessments of customer facilities. These numbers represent actual readings of the volts, amperage, kW demand and power factor, and were taken both with and without the USES<sup>®</sup> technology. Review the recorded instant demand reductions and efficiency increases:

		USES unit				
	STATUS	OFF	ON	$\Delta$		
	kW	458	441	↓ 17		
	kVA	588	482	↓ 106		
	kvar	368	193	↓ 175		
	CURRENT	709	569	↓ 140		
	VOLTAGE	481	489	↑8		
P	OWER FACTOR	.78	.92	↑.14		

DATA: NATIONAL AGGREGATE COMPANY

	USES unit			
STATUS	OFF	ON	$\Delta$	
kW	718	696	↓ 22	
kVA	751	697	↓ 54	
kvar	348	216	↓ 132	
CURRENT	923	862	↓ 61	
VOLTAGE	473	475	<b>† 2</b>	
POWER FACTOR	.96	1.00	↑.04	

-DATA: FEDERAL COURTHOUSE

GSA Contract Holder

U.S. GENERAL SERVICES ADMINISTRATION

Power Shaver is proud to be the Qualified Contractor and provider of the USES technology for the federal government.

TITLE 056, GROUP 61, SIN 412-99. "ALTERNATIVE ENERGY SOLUTIONS."



#### UNIVERSAL SHUNT **EFFICIENCY** SYSTEM

USES<sup>®</sup> MFG INC. is the manufacturer of a line of electrical energy conservation and power conditioning products. It is a licensee of USES, Inc., developer of the product's technologies.

The Company's principal product is the USES° Shunt Efficiency System, a solid state, power conditioning device which reduces the electrical energy that must be supplied by the utility company to operate electrical loads. It also offers protection from voltage transient surges and spikes and from secondary lightning effects.

The **Benefits** derived from USES° units include:

- Improved equipment reliability, including computer and electronic systems.
- Reduced life cycle maintenance, repair and replacement costs.
- **Energy Reductions and Cost Savings.**

The maintenance-free units are easily installed at service panels or distribution panels, or they can be connected locally to equipment on the line side of any controllers, depending on the facility's equipment and electrical distribution system. Each unit comes with a 3-year warranty covering the repair or replacement of the USES<sup>®</sup> unit.

#### Environmentally Friendly

USES<sup>®</sup> helps the environment. Each year a *single* commercial model XL- 3D 480 volt unit can reduce the consumption of 61,000 kWh - a savings equal to 35.89 US barrels of oil, 10.32 tons of coal, 202,470.96 cubic feet of natural gas, 1,675.02 gallons of gasoline, or 1,500.75 gallons of diesel – and prevent 47.4 tons of CO<sub>2</sub> emissions.

#### Patents

#### USA: US2012 | INTERNATIONAL: WO2012

USES<sup>®</sup> performance was substantiated during the patent application process and is UL, CSA, CE and GSA certified.





**PowerShaver.com** (888) 976-9375 info@powershaver.com

















#### **What Our Customers Are Saying**

**SMITHBRIDGE GUAM INC.** contracted to have USES° Technology installed at the main quarry, the scale house, the main office and the welding shop. This contract was for full surge, spike and lightning protection for all of our electronics and for full power conditioning and kWh reduction. We are pleased to report that our *savings of 28%* are more than projected, after we have analyzed over eight months of power bill tracking. In addition, we have experienced total protection of all our electronics which were damaged before during storms and power surges. We would not hesitate to highly recommend the USES° Technology when considering protection, full-spectrum power conditioning and energy reduction for any commercial facility.

Graeme Ridley, Contracts Manager
Smithbridge Gram Inc. • Yigo, Guam

The AOAO ISLAND COLONY is a 740 room condominium/ hotel and is the tallest building in Waikiki, Honolulu, Hawaii. For many years, we have experienced very poor power quality from our utility, including frequent brownouts and outages. The result of these conditions has been damage to our equipment - such as burned-out elevator control boards, destroyed closed circuit surveillance systems and cameras, along with a very high rate of LED driver failures. We installed the Power Shaver USES® efficiency and conditioning system to improve power quality and protect our facility from damage. I am happy to share that the USES<sup>®</sup> system has eliminated the elevator and CCTV power quality-related interruptions and damage and significantly reduced the LED driver failure rate. In addition to these benefits, the adjusted energy and cost reductions provided by the USES® system are at approximately 10%, exceeding the pre-installation projections. The USES° system is on track to pay for itself in less than one year.

Ashley Auten, General Manager
AOAO Island Colory • Honolulu, Hawaii

#### UNIVERSITY OF HAWAII: HONOLULU COMMUNITY COLLEGE

has experienced power quality and condition problems in several of our buildings, with frequent elevator shutdowns and a high rate of elevator motor burnouts. Since we installed the USES° XL Shunt Efficiency System almost a year ago, the power quality and condition has *improved dramatically* and we have not experienced any power-related interruptions or damage in the building since. The USES° system has increased and stabilized the building's voltage by almost 7 volts per phase, increased the power factor and substantially reduced the kW demand and energy consumption of the building, per our verification recordings and monitoring system. Honolulu Community College is very pleased with the results and we are currently continuing to install the USES° system to other buildings on campus.

> — David M. Tanaka, Facilities Manager University of Hawaii: Honolulu Community College

Per ISOLA's corporate energy reduction desires, the USES® XL model line was installed to reduce energy consumption and electrical costs of operation and to solve a spiking and sagging voltage condition from the utility district's local distribution system that has been interrupting and shutting down Isola's 24/7 manufacturing on a regular basis. Our Isola engineers have been very impressed with the Power Shaver system to accomplish our goals. Very surprising to our engineering and accounting staff tasked with evaluating the energy reduction and cost-savings ability of the USES<sup>®</sup> system, was the additional 27% reduction in electrical cost that we verified. This savings is in addition to the Power Shaver guaranteed \$50,000 per year and 18-month payback. Isola's actual payback period for our USES° system is 13 months. Isola Group has determined the USES° XL system to be a valuable asset to our company and will continue to recommend it to our industry associates.

> — John Poma, Isola HSE Engineer Isola Group • Elk Grove, California

CONTACT YOUR LOCAL AUTHORIZED POWER SHAVER DISTRIBUTOR





info@powershaver.com

. PowerShaver.com