

POWERLINE



The Voice of the On-Site Power Generating Industry

Tracking Valuable EGSA Member Contributions

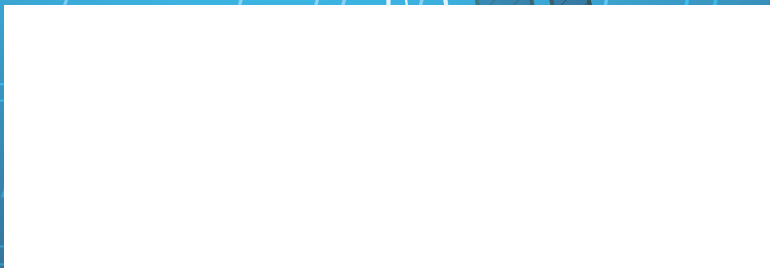
White Paper:
Solving Multi-channel LVDT Measurement System Susceptibility to Heterodyning, "Beating" Between Channels

Case Study:
Active Filter Technology Solves Clean Air Compliance Problems for Boston College

5 Essential Building Blocks for a Thriving Work Culture

Time Capsule Interviews

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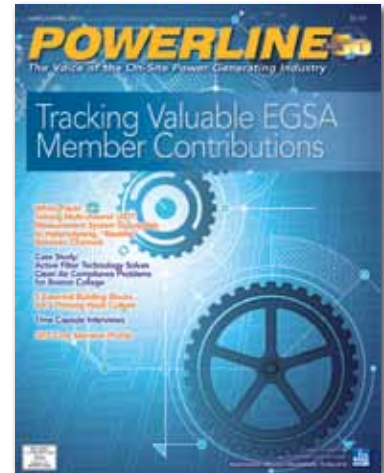
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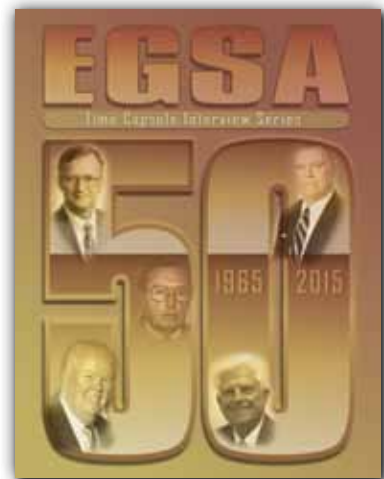
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EVENTS CALENDAR

Conferences

EGSA 2015 Fall Conference

September 13-15, 2015; Denver, CO

Join us as we continue EGSA's 50th Anniversary celebration at the Annual Fall Conference. EGSA's Annual Fall Conference features educational sessions on a broad range of issues impacting today's On-Site Power industry. More information will be available at www.EGSA.org or by calling (561) 750-5575.

EGSA 2016 Spring Conference

March 20-22, 2016; San Antonio, TX

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EGSA 2015 George Rowley Schools of On-Site Power Generation

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Basic Schools

February 10-12.....Scottsdale, AZ
June 2-4.....Charleston, SC
August 11-13.....Minneapolis, MN
December 7-9.....Las Vegas, NV*

*To be held concurrently with POWER-GEN International 2015

Advanced Schools

April 20-23.....Austin, TX
July 13-16.....Atlanta, GA
October 19-22.....Salt Lake City, UT

Industry Trade Shows

POWER-GEN International 2015

December 8-10, 2015; Las Vegas, NV

The world's largest show for power generation, featuring the EGSA On-Site Power Pavilion. For exhibit information, contact EGSA at (561) 750-5575, ext 206 or e-mail Liz Bustamante at l.bustamante@EGSA.org.



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Throughout every issue of Powerline, trademark names are used. Rather than place a trademark symbol at every single such occurrence, we aver here that we are using the names in an editorial fashion only. EGSA has no intention of infringing on these trademarks.

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Ed Murphy
2015 EGSA President
ed@powersearchinc.com

Formal Training in Our Industry

How EGSA Offers a “Value-Add” Like Few Others

Where does one go to get formal training in on-site power generation? I can tell you that in my day-to-day business of providing recruiting services for employers, I find that there are numerous company technical training programs in North America that teach employees about their products. However, only a handful go beyond their product line and provide an employee with a general course covering everything from the basics of electricity and prime movers to paralleling switchgear and system communications. If you are in the On-Site Power Generation Industry, it is vital that you have a basic understanding of the many products that comprise a generator system. While a few of our EGSA Member companies provide serious sales training, when it comes to the industry, the basic principles, the equipment overview and the fundamentals of power generation, nobody does it better than we do!

First, consider our instructors. All of our Rowley School Instructors come from power generation's top manufacturing companies and their distributors and dealers. I would gamble that each school hosts the resources of more than 250 combined years of experience in power generation!

Our Continuing Education Units (CEU) program is an optional portion of the Rowley Schools. It is designed to demonstrate that the student retained information that was presented during the school. CEU Exams have to be submitted within 30 days of attending one of our schools. Imagine the different backgrounds that each of the 40 students per school might have

EGSA George Rowley School of On-Site Power

Generation - Our 2015 Instructors & their Firms

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Anna, Inc.

Ole Haaland

ASCO Power Technologies

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Bill Kaewert

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in our industry. Sales, marketing, administrative, even executives need to have a basic overall understanding of power generation to succeed in this industry. Most would agree that the credibility as a sales person is greatly increased when they can demonstrate, not just knowledge of their product or service, but a real understanding of the industry or market in which it is to be used.

Honoring Our History & Our Milestones – Rewarding Value for Great Leadership in Our Education Programs

Annually, EGSA honors the Rowley School Instructors who reach our established milestones (5, 10, 15 years, etc.) during our annual Spring Conference. As a matter of fact, the first people reading this issue will be in Jacksonville during the time that we honor our Rowley School Instructors in 2015. However, when EGSA Staff informed me in January that we would be honoring one of our Instructors for 30 years of service to the industry, I was floored. Herb Daugherty is who I am speaking of.

It shocked me that:

A.) he is still an active, vibrant participant...volunteering his time and service for 30 years, and

B.) that EGSA has been providing power generation education benefits for our membership since 1983!

Herb has a great interview later in this issue of *Powerline*, as we are honoring him for his years of service as a Past President of EGSA. It is worth mentioning here that within our EGSA Education Pro-

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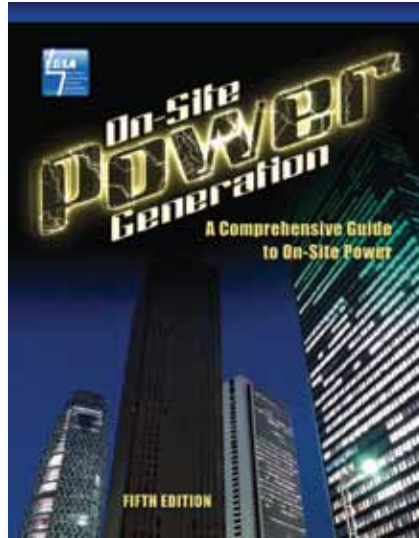
Michael Pope
EGSA Director
of Education
m.pope@EGSA.org

"I'll Take the 5th" And I'm not talking about a mere amendment here!

This month we introduce the 5th Edition of our well known *On-Site Power Generation* book, generally known as the "bible" of the industry.

Before the book is opened some major changes will become immediately apparent. The cover design is modern, implies a need that can be well satisfied by our member companies, and is very dramatic. I'm proud to say it was created in-house by our own Peter Catalfu, whose creativity has done much to modernize the printed face of EGSA.

While the main title remains, we have changed the sub-title from A Reference Book to the more descriptive A Comprehensive Guide to On-Site Power. We have gone from a hard cover to soft cover like many books of this size. This makes it lighter, slightly thinner and easier to pack. This will also reduce the lead time for future printings.



Here are some quick facts about the 5th Edition:

- There are 47 chapters vs. 37 chapters in the 4th Edition
- Most chapters have been re-written and updated
- There are more than 700 pages vs. 600
- Many chapter images are now in color
- 56 authors have contributed (several chapters had co-authors)
- Chapters were reviewed by a total of 42 members (some reviewed several chapters)

New chapters in this Comprehensive Guide to On-Site Power include Generator Protection, Bi-Fuel Systems, Landfill Gas, Seismic Considerations, Engine Pre-heating Systems, Network Based Communications, Power Management, Small Liquid Cooled SI Engines, Generator Set Sizing and Switching the Neutral.

We had a set procedure for the development of *On-Site Power Generation* that largely followed that established by the late George Rowley during the preparation of the 4th Edition: call for authors and

reviewers; submission of chapter drafts; chapter review by peers; changes by author; style editing; back to author for final approval; preparation for printing.

During production of the 4th edition George realized that every chapter author, inevitably, had a different writing style. Different words were used to describe the same thing. For example, engine generator set; electric generator set; generating set; genset and generator set. He recommended that we employ a style editor to bring style and grammar to a consistent level. In doing so, I believe that we have brought a new level of professionalism, consistency and readability to the book, while also making it a better text book for technical colleges offering on-site power generation courses. And talking of consistency, 14 of the authors are also Rowley School instructors so

there will be greater commonality between the book and the school modules.

Our sincere thanks go to our 98 talented authors and reviewers and their employers; they have contributed many hours of their time on this project and should be proud of the result. Special thanks also go to past president Steve Stoyanac who volunteered to chair the 5th Edition sub-committee of the Education Committee many years ago and stayed with the project until its completion.

This Comprehensive Guide to On-Site Power should be an essential part of any technical training course regarding on-site power generation. Employers would be wise to make it available to new hires, people joining our industry and people that already have power generation experience. Technicians preparing for the Apprentice or Journeyman level EGSA certification test will find the 5th edition invaluable. Every person that attends a Rowley school receives a copy; it is included in the registration fee. Some generator set manufacturers are also including this as a part of their in-house and distributor training.

We invite you to take the 5th; we think that you will be very impressed. ■

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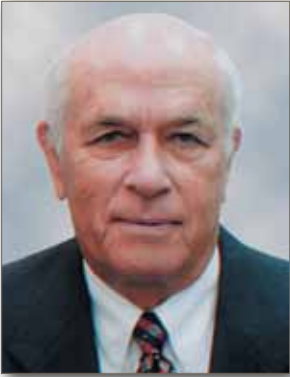


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Herb Whittall
EGSA Technical Advisor
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Codes & Standards

The NFPA National Electric Code (NEC) committees met in Hilton Head, SC to consider the public input that was received for changes to the 2014 edition of the NEC. As a member of Panel 13, we considered the requested changes to Articles 445 – Generators; Article 480 – Storage batteries; Article 695 – Fire Pumps; Article 700 – Emergency Systems; Article 701 – Legally Required Standby Systems; Article 702 – Optional Standby Systems; and Article 708 – Critical Operations Power Systems (COPS). Our Committee was also asked to write 3 new articles for the NEC Article 706 – Energy Storage Systems; Article 710 – A.C. Microgrids and Article 712 – D.C. Microgrids. There were just over 200 Public Input items (PIs) that the Committee had to consider. In order to speed up the process, NFPA divided the committee into 4 task groups to work on the PIs before the meeting in Hilton Head. NFPA also instituted a new process. Previously, when there were differing views on the merit of a PI, it took considerable time to determine how to proceed. Now when a PI is determined to have merit, it is worded into a “First Revision.” If the PI is determined to not have merit, for any number of reasons, it is “Resolved.” The Committee statements are still required to outline why the Committee felt the way it did, but the new process, and a huge amount of work done by the Task Groups, resulting in wrapping up on Thursday night, rather than Saturday, as was previously the case. All “First revisions” are still required to be approved by a 2/3 majority of the committee on a ballot due March 13. The first draft of what we accomplished at our meeting will be available from NFPA on July 17 and public comments concerning the changes are due to NFPA by the 31st of August, 2015. Then a second and final meeting of the committees for the 2017 edition of the NEC will be held in San Diego, CA from November 2nd through the 14th of this year.

In 445.11 there was considerable discussion about who should mark whether the generator neutral is bonded to the generator frame or not. The committee decided that the generator manufacturer should mark the generator at the factory to indicate whether the bonding was to the frame or not, and if a change is made in the field, the person making the change is responsible for marking the change on the generator.

Article 700.5(D), 701.5(C), 702.5 and 708.24(C) were all modified to add that Transfer Switches must be marked with their Short Cir-

cuit Rating. In Articles 700.6(A), 701.6(A) and 702.6(1) the word “Derangement” was changed to “Malfunction.”

The Storage Battery sections in 700 and 701 were rewritten to reflect changes in technology. In the same vein, the last sentence of 480.7(D) was deleted.

The reference to “Type LFNC-B” for Fire Pump wiring was deleted in Articles 695-6(D) and 695.14 (E) as it was felt to be an unnecessary restriction.

The writing of the new sections were felt to be a “work in progress” that would take some revision to be acceptable. The proposals to accept a “First Revision” for Article 706 – “Energy Storage Systems” was approved even though it might be re-writing much of article 480 and there was discussion whether both sections would be necessary.

Proposed Article 710 - “A.C. Microgrids” was “resolved” as the committee determined that the contents should appear in other articles. Article 712 – “D.C. Microgrids” was approved even though there was some feeling that it should also be in other sections. The Committee seemed to think that, due to the increased use of D.C. systems using photovoltaic and wind systems, it warranted inclusion in this article to allow for intense public comment.

There is some controversy about ISO 8528 Part -1 since it added a new rating – Data Center Continuous (DCC). It did not pass the US vote. However, the US is only one of 13 countries that will ultimately vote on its acceptance. The problem is that one manufacturer in the USA has apparently applied for trademark rights on DCC. In the US this would void such a UL standard and others do not allow a standard that contains a requirement such as this. However, I noticed in the newest versions of ISO 8528 Part 7 Technical declarations for specification & design and Part 9 – Measurement & evaluation of mechanical vibrations that the following paragraph has been added to the beginning of those standards. “Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The ISO shall not be held responsible for identifying any or all such patent rights.” However, looking at the voting on IS3046-3 “Test measurements”, I see that all 13 Nations voting said that the standard was not referred to in regulations in their country. ■

FROM THE TOP

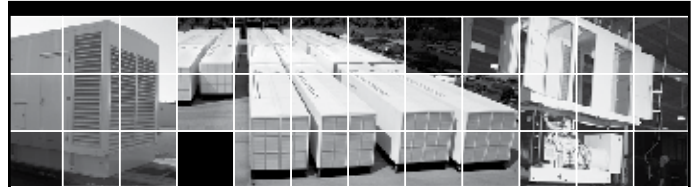
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gram, Herb has not only volunteered his time for 30 years as of 2015, he is also one of only 8 recipients of the EGSA James Wright Educator Award, awarded on an as-needed basis to honor individuals who have devoted their energy to the betterment of the Association's Education Programs. Herb Daugherty is also one of our first instructors! Today he is the EGSA Manager of the Rowley Schools. Herb was the driving force behind the creation of the Two-Tiered (Basic & Advanced) school and the recent curriculum review. Herb is also responsible for leading and championing the instructor enhancement programs, the selection of new instructors, as well as the rollout and implementation of course materials updates.

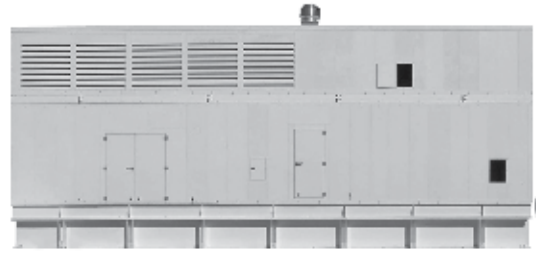
The Value-Add Message

For a little more than \$2,000, depending on air fare costs, any employee of a member company can receive a top-notch introduction to our industry within 3 days. Those that have attended the basic school, or already have a good understanding of the basic electrical and mechanical systems have a second tier education opportunity available in our Advanced School.

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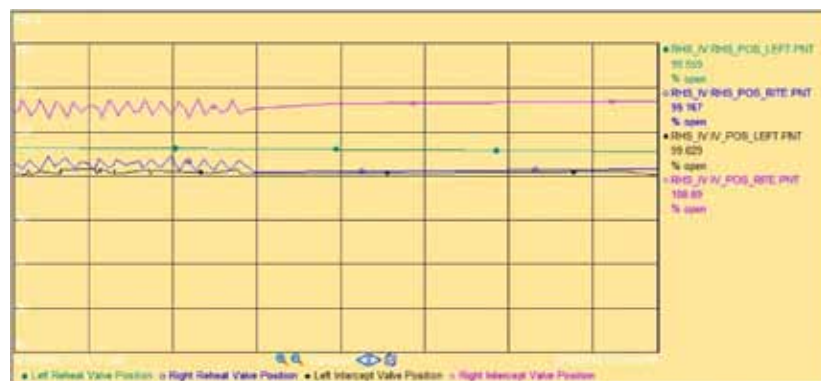


Solving Multi-channel LVDT Measurement System Susceptibility to Heterodyning, "Beating" Between Channels (Cross Talk)

Solving the age old problem of cross talk between sensors even if the master signal conditioner fails.

When LVDT signal cables are bundled together or laid close to each other in a wire trough, even for short distances, the result can be a mutual interference phenomenon called heterodyning or "beating". This effect is created when the frequencies of the oscillator in the individual signal conditioner driving the excitation signal to each LVDT vary slightly. Since the signal cables are close together, they can capacitively couple among each other, resulting in a very low frequency signal that is the difference between the frequencies of the individual oscillators. This difference frequency signal can ride on the DC output of the LVDT signal conditioners, appearing as low frequency ripple or noise with a period measured in fractions of a second, or as a repetitive slow drift with a period of many seconds. When a pair of LVDTs are used together for redundancy, this effect may be evident on only one channel of the system. In systems with larger numbers of LVDT channels, this effect may be found in one or more channels, depending on many factors like cable length and layout as well as shielding and grounding.

The chart below shows an example of this drifting over time on the left side and the elimination of the effect utilizing the Master/Slave function



Graph is courtesy of Rawhide Energy Station, Platte River Power Authority, Fort Collins CO.

The waveform above in the output was noted in right reheat and intercept valve positioners that was using dual LVDTs in redundant systems. The master / slave function removed the beat frequency signal and the waveform flattened.

Typically the way to solve this problem in multiple channel systems is to create a "master" oscillator by using the oscillator from one of the signal conditioners to supply the same excitation frequency to all of the LVDTs. The oscillators in the other LVDT signal conditioners are overridden by the master and considered "slaves". The idea is that there cannot be any beat frequency interference if all the LVDTs are operating at the exact same frequency.

This practice works quite well but has a major drawback, because the "redundant" system is no longer fully redundant. The system is now dependent on one oscillator in one signal conditioner to supply all the LVDTs with the proper excitation frequency. If the master fails, two things could happen: either your other channels stop operating, or they revert back to their original oscillator frequencies and the multiple channel DC outputs now display beat-frequency-produced noise, ripple, or output drifting. Many companies offer LVDT signal conditioners with a master/slave function, but they all are fully susceptible to the beat frequency problem if the designated master oscillator falters or fails. Sometimes when LVDTs are used in a redundant pair this will be evident on only one channel of the system. In multiple channels it can cause similar effects in one or multiple channels or none and depends on many factors like cable layout, grounding, shielding along with various cable lengths etc.

Alliance Sensors Group has considered this beat frequency problem with multiple LVDT installations and developed a successful solution to this problem. Because the S1A and its variants have a digital address for RS485 communication capability, we are able to use this digital feature to maintain the full redundancy of multiple LVDT systems. If the "master" were to fail, another "master" having a different digital address would instantly come on stream to maintain a single excitation frequency. In this approach the only thing lost in a "master" oscillator failure is the former master channel itself. For multiple channel LVDT systems, the integrity of the output signals from the other channels is fully maintained. This "auto-mastering" feature is unique to the Alliance Sensors S1A and its variants.

For more information on Alliance Sensor Group, contact sales@alliancesensors.com or go to their website at www.alliancesensors.com. ■

Tracking Valuable EGSA Member Contributions

In our 50th year, we have made a great effort to showcase some of the achievements and milestones that made this organization great. EGSA also takes special care to provide details in our annual Buying Guide, that is produced by Diesel Progress Magazine as well.

During the last 3 years, this list of member contributions has continued to evolve. For example, last year we added Working Group Chairs as a criteria of leadership and EGSA activity. We hope that this list continues to take shape as we evolve as a group.

It should also be noted, especially this year when we have so many EGSA Committee Chairs and Officers changing leadership, that EGSA recognizes service as a Committee Chair or Officer after 1 year of service in the position. This means that several of your new Chairs and Officers will not be added to the list of Member Contributions until next March when this article is printed again.

This list is also meant to track current members who have achieved the criteria set forth that makes them potentially good leadership material when a task/job/program needs attention. The list also tracks people who are currently teaching at EGSA schools, worked on our reference book, etc.

Speaking of the reference book, shortly after the Spring Conference, we will be adding all of the people who have worked on the 5th edition in honor of that achievement, once the project is completed. Look for this list to grow by a few people over the next year.

If this sort of thing interests you, we do track this list in real time on our website. Feel free to visit www.egsa.org/aboutus/leadership for periodic updates.

Name	Executive Board	Director	Committee Chair	Committee Officer	Working Group Chair	Book Author	Past Award Recipient					School Instructor
							Timmler	Carpenter	Johnson	Wright	President's	
Ahmed, Mehmood						x						
Alley, Dave		2001 to '03	ED 2003 and before			x	2001					1998 to current
Anderson, Lowell								1972				
Anderson, Wayne						x						
Bachman, Don						x						
Barrios, Daniel												2012 to current
Basler, Matt		2005				x						
Basler, Mike						x						
Bauer, Wamer	2005 to '09	2002 to '04	CG 1993 DG 2003	CC 2004 to '05	Russell Grant 14'	x	1993	2011				
Beasley, Vaughn	2011 to current	2008 to '10	DD 2009 to '11	DD 2006 to '08	Exploratory Task Force 2014 to current							
Benke, James						x						
Berg, Brian		2011 to '13	MT 2009 to '11	MT 2007 to '08								
Birdsong, Bob												2004 to current
Blackman, Donald						x						
Brown, David	2015 to current	2009 to '11	BG 2010 to '11									
Carr, Raymond												2007 to '10
Casterline, Les			MT co-chair 2003 to '05 MT 2006 to '09									
Chelmecki, Chris						x						
Chen, Scott						x						
Chrysam, Walter												2007 to current
Clophus, Patrick						x						
Cutro, David												2015 to current
Dauffenbach, Mike						x						2004 to current
Daugherty, Herb	1988 to 1992	1985 to 1988	Eng Section Chair 1987 to 1991	Electrical Control Components - 1983 - 1986 and Engineering Section Vice 1983-1986		x	1989	1995	1996	2000	2009	1983 to current
Day, Bill												2005 to '14
DeMartino, Nathan				CC 2011 to '13 DD 2013 to 2014								
Denning, Jess												2012 to current
Detor, Nick				GN 2009 to '10								
Duke, Keith						x						2001 to '07 2011
Evans, Katie		2013 to current	IT 2012 to current	IT 2011 to '12								
Evans, Steve		2012 to 2014	GN 2011 to '12	GN 2009 to '10	Digital Paralleling 2013 to 2014	x						2010 to current
Fennell, Brad		2010 to '12	TS 2010			x						
Finney, Nick												2008 to '10
Franks, Wyatt				GN 2013 to '14								
Gaines, Terry						x				2008		1999 to current
Garcia, John			MB 2012 to current									
Haaland, Ole		2015 to current				x						1998 to current
Habic, Charlie	2014 to current	2007 to '09	MB 2006 & '07 AHNM 2009 & '10 NM 2004	MB 2004 to '05 CC 2011 to '13				2012			2013	
Hafich, Bob	2013 to current	2001 to '03 2011 to '13	MB 2008 to '11 TC 2009 to '11	MB 2004 to '07 TC 2004 to '08			2012	2010			2012	
Hafich, Joe		2008 to '10	DD 2003 to '08 SLRP 2007 to '13				2010				2012 (two awards)	
Hamilton, Randy						x						
Hartzel, Ron	2007 to '11	2003 to '06	CS 2003 to '07 EM 2006 to '10 SLRP 2007 to '13				2008				2012	
Hawkins, John			CS 2008 to '10	CS 2006 to 07								
Handlin, Harry												2008 to current

KEY TO COMMITTEE CODES

AHNM Ad Hoc Nominating Procedures	DG Distributed Generation Subcommittee	GN..... Green	PG..... Power Generation Subcommittee
BG.....Buying Guide	DD.....Distributor/Dealer	IT.....International Trade	RB.....Reference Book
CS.....Codes & Standards	ED.....Education	MT.....Market Trends	SC.....Scholarship
CG.....Co-Gen/Environmental	EMElectronic Media	MB.....Membership	SLRP.....Strategic Long Range Planning
CN.....Convention	GS.....General Subcommittee	MMMilitary Mobile Power	TS.....Trade Show
CC.....Communications & Conferences	GR.....Government Relations	NM.....Nominating	TC.....Tech Certification

MEMBER RECOGNITION

Name	Executive Board	Director	Committee Chair	Committee Officer	Working Group Chair	Book Author	Past Award Recipient					School Instructor
							Timmier	Carpenter	Johnson	Wright	President's	
Hinde, Tim						x						1998 to current
Hodgkins, Rick				DD 2011								
Hoef, John				MT 2012 to '14								
Hurtado, David		2001 to '03										
Hunt, James						x						
Iskandar, David						x						
Jarrett, Harold												2015 to current
Johnson, Anthony												2012 to '14
Johnson, Gerald (Jerry)						x						
Kaewert, William		2014 to current				x						2010 to current
Kacvinsky, Ray	2002 to '06	2000 to '02	NM 2009									
Kelly, Jr., John	2008 to '12	2005 to '07	DD 1997 to '02 SLRP 2007 to '13		50th Anniversary 14' to 15'			2013			2012	
Knittel, Richard					TOYA 2012 to current							
Koehmstedt, Steve												2011 to '14
Lagree, James						x						
Lathrop, Todd		2012 to '14	CS 2011 to '13	CS 2007 to '10	Working Groups Chair 15'	x	2013					2005 to current
Laurents, Debra	2010 to 2014	2006 to '08	SLRP 2007 to '13	MB 2008 to '11 TC 2006 to '07							2012	
Lawrence, Steve												2002 to '08 2011
Lechtanski, Joe						x						
Leslie, David						x						
Levere, Trish					OSHDP 2013 to current							
Lewis, Robert			GR 2012 to current	GR 2009 to '11								
Lewit, Tanja				IT 2012 to current								
Linton, Greg	2006 to '10	2002 to '04	TC 2004 NM 2010 SLRP 2007 to '13					2014			2012	
McSheffrey, Jason												2011 to '14
McDonald, Bobby		2008 to '10		DD 2003 to '09								
McDonald, Jim			GN 2012 to 2014	GN 2011 to '12		x						2008 to current
Mueller, Robert						x						
Morrill, Martin				CC 2013 to '14								
Morrison, Rick		2013 to current		DD 2011 to '13							2013	
Murphy, Debra						x						
Murphy, Ed	2012 to current	2003 to '05	MB 2003 CC 2011 to '14	CC 2007 to '10			2003				2013	
Neland, Richard				IT 2005 to '08								
Olsen, Dick			IT 2004 to '08									
Osenga, Mike											2013	
Oshesfsky, David				MB 2013 to current								
Padden, Mike			GR co-chair 2009 to '11									
Pafford, Bill		2004 to '06	CS 2001 to '02									
Pearson, Dennis		2014 to current	ED 2011 to '14							2013		
Perez, Larry		2011 to '13				x						1995 to '98 2004 to '08
Perez, Luis												
Petty, Walter		2013 to current		GN 2011, MB 2013 to current								
Phillips, Dave				GN 2013 to 2014								

KEY TO COMMITTEE CODES

AHNM Ad Hoc Nominating Procedures	DG Distributed Generation Subcommittee	GN..... Green	PG..... Power Generation Subcommittee
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Name	Executive Board	Director	Committee Chair	Committee Officer	Working Group Chair	Book Author	Past Award Recipient					School Instructor
							Timmmer	Carpenter	Johnson	Wright	President's	
Pierson, Ben				ED 2011 to '13		x						
Piske, Robert			DD 2011 to '14	CS 2010			2014					
Ponstein, Brian												2015 to current
Pope, Michael	2009 to '13	2005 to '07	ED 2003 to '06 GN 2009 to '10		2013 ELS Working Group	x	2006	2009		2003	2013	2007 to current
Prevoznik, Mark						x						
Prosser, Al		2008 to '10		MB 2008 to '11								
Redding, Wayne												2012 to current
Risser, Lyndon				DD 2009 to '14								
Roundtree, Dennis		2007 to '09	ED 2007 to '08	ED 2004 to '06			2009			2006		1998 to current
Schaefer, Rich						x						
Schroeder, Ron		2010 to '12				x						1994 to current
Scott, Richard						x						
Siebert, Marty						x						
Simkovic, Robert												2012 to '14
Simmons, Robert					Silencer 2012 to 14	x						
Slater, Lanny		2013 to current	IT 2010 to '12	IT 2009 to '12								
Steele, Mark		2010 to '12	GR co-chair 2009 to '11	GR 2005 to '08								
Stoyanac, Steve	2001 to '05	1998 to '00	MB 2001 to '03 NM 2005 & '08 RB 2006 to '12			X	2000	2006				2008 to current
Stringer, Dave		2015 to current		GR 2012 to 2014		x						
Struss, Darrell				IT 2009 to '10								
Svendsen, John				CS 2011 to current								
Sweeney, Rob				TC 2009 to '10								
Szalzus, Mark												2006 to '08
Tingle, Kyle		2012 to '14	MT 2011 to '14	MT 2009 to '11								
Van Maaren, Richard						x						
Ven Horst, Brian				CC 2013 to current								
Vennie, David				IT 2013 to '14								
Vild, Brent												2007 to '09
Visioli, Armand		2003 to '05	CC 2003 to '04				2005				2013	
Walters, Greg		2009 to '11		ED 2011 to current								
Watson, Darrel												2006 to '09 2011
Weimer, Randy		1996 to '98										
Wein, Tom		2015 to current	ED 2014 to current	ED 2013 to '14								
Westhofen, Chuck				MT 2009 to '11								
Wilhelm-Volpi, Lorel				IT 2009 to '10								
Winnie, Peter						x						
Witkowski, Mike		2009 to '11	C&SS 2014 to current	CS 2008 to '13		x						2008 to current
Whittall, Herb		1993 to '95						1996				
Wolf, Fred						x						
Wood, Ray			MM 2003 GR 1985, 2004 to '08				1985					
Zimhelt, Joe				MT 2011 to current								
Zhou, Xin						x						

One final note, active service to an organization comes in all shapes and sizes. If you are interested in becoming more active in your Association, the singular best way to get involved is to act! Contact an EGSA Board Member or one of our knowledgeable staff members, if you are interested! ■

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Active Filter Technology Solves Clean Air Compliance Problems for Boston College

Boston College was concerned. Gail Hall, the college's Director of Health & Safety, had just been notified by the Massachusetts Department of Environmental Protection (DEP) that three emergency diesel generators on the college's Newton, Massachusetts, campus were not in compliance with the state's clean air standards. The generators, which produce electric power for emergency lighting and elevators in the event of a utility power outage, were emitting unacceptable levels of airborne particulates. After an initial investigation, the college realized that the issue was considerably bigger than the three generators cited. Solving it would entail assistance from an environmental consulting firm; a continued commitment by the college's administration to the health and safety of its students, staff, visitors, and neighbors; and a new active diesel particulate filter technology from a Massachusetts company, Rypos.

Sizing the Problem

To address the problem, Gail worked closely with Boston College's administration and GeoInsight, a Littleton, MA, environmental consulting firm that had been handling air emissions permitting, compliance reporting, and other support services for Boston College. After an initial meeting to discuss the DEP's directive, Boston College commissioned GeoInsight to conduct a comprehensive survey of all its emergency generators including locations, sizes, buildings served, exhaust stack configurations and heights, and the proximity of receptors – air intakes, doors, windows, vents, or any other openings in building envelopes that could allow potentially harmful airborne particles into confined living or meeting spaces. The primary focus of the survey was to identify all campus generators that did not meet DEP air quality emission regulations and to bring them into compliance.

The survey showed that, of the 50 generators serving Boston College's three campuses, 19 were in compliance with Massachusetts DEP regulations. Of the remaining 31 generators that did not meet current state regulations, 22 could be remedied through modifications to their exhaust stacks to divert emissions away from receptors. Due to their sensitive locations and other considerations, however, the remaining 9 generators would require a more advanced solution that actually eliminated the airborne particulates rather than just diverting them.

Finding A Better Solution

In order to avoid highly intrusive modifications to the buildings where these generators were housed and to preserve the aesthetics of Boston College's beautiful campus, the school began exploring diesel particulate filter technologies.

GeoInsight first investigated the possibility of using passive diesel particulate filters, but rejected the idea. Suzanne Pisano, GeoInsight's Director of Compliance, explains, "Whenever we are



When Boston College's emergency diesel generators were cited for non-compliance with Massachusetts clean air standards, the administration chose to install new active regeneration technology filters from Rypos rather than accept the risks and expense of passive filters.

faced with a problem like this, we look for a solution based on the best achievable control technology. In this case, the Rypos active diesel particulate filter was that technology. There are other replaceable filter options, but they would have imposed limitations on the run times of the generators and required high maintenance. If we had gone with passive filters, we would have risked having to choose between shutting down generators during an outage due to run time restrictions or incurring engine damage and possible DEP fines."

The irony that passive diesel particulate filters meant to protect the college's students and staff could actually leave them at risk was not lost on Pisano.

In her search for a more acceptable solution, she came across Rypos, Inc., a Holliston, MA, company specializing in actively regenerating diesel particulate filters (or active DPFs). Made from sintered metal fibers, these segmented filters are electrically regenerated (or cleaned) by heating to 700°C and incinerating the trapped soot containing toxic contaminate particles. The system's microprocessor control monitors filter back pressure, temperature, and elapsed time between regenerations to optimize regeneration cycles and maximize filter efficiency and generator availability. Entirely automated, the regeneration cycle takes only 3 minutes and uses less than 1% of the generator's electrical output. The company's segmented filter design makes this rapid, extremely energy efficient cleaning possible. By limiting each cycle to a single filter element, regeneration can be performed quickly with no impact on power availability from the generator. The built-in control system tracks which segments have recently been cleaned and schedules the ones are due to be cleaned.

The Rypos systems installed at Boston College reduce harmful emissions by trapping and eliminating harmful particulates and

CASE STUDY

converting carbon monoxide and other hydrocarbons into carbon dioxide and water.

The company's Active DPF systems can also be configured with selective catalytic reduction (SCR) to achieve NOx reductions of 95% or more.

Pisano and her team were impressed by this active regeneration technology for a number of reasons. It eliminates the time and expense of changing passive filters as well as the associated downtime. The technology also eliminates any restrictions on cold starts or idle times. The regeneration process is not dependent on engine temperatures. With the active filters, no maintenance is required and generator availability is 100%.



After an audit of 50 generators on its three campuses, Boston College set about modifying the stacks of 22 emergency diesel generators to increase the distance between their exhaust and receptors and to affect compliance with Massachusetts Department of Environmental Protection regulations.

How Boston College Spent Its Summer Vacation

GeoInsight drafted a plan to bring the problem generators into compliance with DEP regulations. While Suzanne Pisano negotiated the timetable with the Department of Environmental Protection, Gail Hall worked with Boston College's administration to secure funding (the project was unplanned and not budgeted) and the college's facilities department to ensure that the work would be completed on time.

Based on the timetable approved by Massachusetts DEP, the project was to be completed in 2 phases by September 30, 2012. Most of the work was performed by contractors under the direction of Boston College Project Manager, Paul Scarnici.

The "Easy Fixes"

Based on GeoInsight's plan, Phases I and II focused on "easy fixes" - those generators that could be brought into compliance by reconfiguring their exhaust stacks (replacing right-angle or snub-nosed stacks with straight ones) or increasing the height of the stacks to disperse the particulates over a larger area. This phase involved 9 emergency generators and was completed in 6 weeks.

Phase II involved more extensive modifications to 13 generator stacks, and took 16 weeks.

Installing Active Diesel Particulate Filters

Phase II of the project also included installing Rypos Active Diesel Particulate Filters on the remaining 9 generators and took the better part of the summer of 2012. Scarnici turned to Milton Cat to coordinate the installation of the filters and to oversee the contractor doing the work.

The filters were installed on top of the generators to save space and reduce cost. In cases where the generator enclosures were not strong enough to support the weight of the filters, special frames



The college installed Rypos Active Diesel Particulate Filters (ADPF) on 9 generators. Through a process known as regeneration, Rypos ADPFs clean themselves by heating up to 700°C and burning off harmful particulate contaminants in less than 3 minutes, using less than 1% of the generator's output.



Installed on a generator in the basement of 2000 Commonwealth Avenue, a high-rise Boston College residence hall,

Rypos Active Diesel Particulate Filters eliminated the high cost and construction problems of running an exhaust stack to the roof inside the building.



Boston College also chose to install Rypos Active DPFs to eliminate harmful particulate emissions from generators in close proximity to campus buildings.

were constructed.

Notes Scarnici, "The project went very smoothly thanks to efforts of a lot of truly talented people at Rypos, Milton Cat, and Boston College."

Lessons Learned

Looking back on the project, Gail Hall comments, "This project caught us a little off guard. Being cited by the Massachusetts Department of Environmental Protection was unsettling; being given such a short window to remedy the problem was even more disconcerting. We hired good people who gave us good advice, and we completed the project ahead of schedule. Moreover, we learned how to deal with future problems of this nature."

Like everyone involved, Hall was impressed by the way the college administration responded: "Boston College has responsibilities to ensure the safety of our students, to protect the environment, and to serve as responsible stewards of these beautiful campuses. At times, any one of these responsibilities can be daunting, but this project challenged us to deal with all three at once. I believe that everyone involved is proud of the manner in which Boston College lived up to its commitment."

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5 Essential Building Blocks for a Thriving Work Culture

It's All Premised on Having the Right Players, Says 'Coolest Young Entrepreneur'

By Adam Witty, Founder and CEO of Advantage Media Group

What makes a successful business thrive? That's what 8 out of 10 new entrepreneurs would like to know, because their businesses fail within the first 18 months, according to Bloomberg.

Adam Witty has managed to turn plenty of heads in the business community as founder and CEO of Advantage Media Group, (<http://advantagefamily.com/>), an international publisher of business, self-improvement, and professional development books and online learning.

Witty, who was selected for INC Magazine's 30 Under 30 list of "America's coolest young entrepreneurs" in 2011, says creating the right environment is crucial for success. The magazine also featured his company in their top 500/5000 list of the Fastest Growing Private Companies in America for 2012 and 2013, when the company ranked No. 42 in Media and No. 36 for Top 100 South Carolina Companies.

"You don't have to be a business guru to recognize when a business is firing on all cylinders, that everyone is putting their skills to maximum use, working together, and actually having a good time. How to create that chemistry – that's the question," says Witty, the author of five books and an in-demand speaker and consultant on marketing, business development, media and publishing, and entrepreneurship topics.

"Of course, you need folks with the right qualifications who are willing to bring their A-game every day – that's crucial. But there are also character traits to look for: a positive, can-do attitude, for instance. If a person doesn't fit in the mix, not only will he or she be less likely to bring their best, they can also compromise everyone else's game."

What it takes to get that hum every CEO wants, both in the office and in one's respective industry.

Staff your team with A-players; they're worth the wait.

An A-player is someone who brings all of the necessary qualifications to the table – perhaps more than you were expecting – and that something extra as a human being. Of course, that isn't always readily apparent during a 45-minute interview; it can take time to see the true colors of a talented individual to come through. This speaks to the importance of having an intuitive hiring manager, "which may be a small business's CEO," Witty adds. Also, it's important to have A-players who put the team first, who have helped Advantage Media Group earn a spot on the Best Places to Work in South Carolina list for 2013 and 2014. Egomaniacs who cannot collaborate can to grind productivity to a screeching halt.

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The importance of having fun ...

“Having fun not only helps your team do well, it’s a sign that you’re doing things right,” Witty says. “Where fun and work meet is the understanding from employees that they’re making a difference. You want a team of individuals who are motivated by the ‘why’ of what they do.” Fun at work means having energy and enthusiasm while tending to the tasks at hand.

Make employees, and clients, your extended family.

A family environment significantly facilitates a team mentality, especially for those quiet geniuses who like to keep to themselves because they’re shy. But why stop there? Extend the love to clients, suppliers and other crucial components of the business. Without these folks, your business couldn’t survive.

Direction: understanding the “why;” encourage difference makers.

“Our team members are driven by the ‘why’ of what we do,” Witty says. “The right content in the right person’s hands at the right time can change the world forever. We believe in sharing stories, passion and knowledge to guide and help others learn and grow.”

Commit to lifelong learning.

Seek to uncover and promote the leader in every one on your team by encouraging all members to follow a path of personal and professional development. With increased knowledge, experiences and skills, people lead to a more fulfilled life, which can profit everyone within a working environment. ■

About the Author

Adam Witty is the Founder and Chief Executive Officer of Advantage Media Group. What began in the spare bedroom of his home is now an international publishing company. Advantage has been named to the prestigious Inc. 500/5000 list of American’s fastest growing private companies in 2012, 2013, and 2014 and the *Best Places to Work in South Carolina* list for 2013 and 2014.



Adam has been featured in *The Wall Street Journal*, *Investors Business Daily*, *Young Money Magazine*, and on ABC and Fox and was named to the 2011 *Inc. Magazine 30 Under 30* list of “America’s coolest entrepreneurs”. In 2012, Adam was selected by the Chilean government to judge the prestigious Start-up Chile! Entrepreneurship competition.

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and two-time Board of Directors Member

Forty-two Years and Counting, Our 4th Generation Missourian from St. Louis Puts Down Roots in Our Association 1973 – To Present

Talk about roots, Warner Bauer established them a long time ago with EGSA! He is grounded and makes great friends wherever he goes. Warner is also a constant (as in Northern Star constant) in multiple areas of his life. From being an active family man and husband to wife, Donna and his children and grandchildren, to his ability to connect with people from all generations and geographies, Warner is one of those guys who is focused on the big picture and longevity. He is one of EGSA's longest running volunteer assets too, never resting on his laurels in our Association. Why, in just the last few years, Warner has actively donated time to work on 2 Nominating Committees and 3 Executive Advisory Boards for recent EGSA Presidents, he chairs the Russell Grant for Veterans Working Group, is a member of the 50th Anniversary Working Group, all while continuing to sponsor new members. Warner has also been responsible for Kickham Boiler's Vaporphase Division, being an annual sponsor of our Awards Reception & Banquet for the last 8 years running.



Warner begins, "Both Donna and I were raised and attended schools in St. Louis. We got married and all of our children and grandchildren live there, 4th generation for both Donna and myself. They make good beer and it is a great Midwestern locale. I have traveled to every state except Idaho, all the countries in Europe, Singapore, the Philippines, many other countries and places around the globe, but St Louis was always home. I might even consider moving to Florida for winter, but I couldn't leave the Ozarks in the summertime, no way!" he confides.

He served in the U.S. Army after high school in armored infantry and was honorably discharged in 1956. In February of 1957, Warner's first job after service to our Country was with St. Louis Shipbuilding, which boasts a rich history for St. Louis (the City), engineering and producing self-propelled commercial towboats and barges for the inland rivers. He worked in the shipyard as a fitter's helper. "Fitter's helper was my first title, basically, I would help fit the pieces up to be welded," he recalls.

"In April of 1957, I was sent into the Engineering Dept. as an apprentice draftsman and blueprint operator. Then, in 1959, I was sent to the Vaporphase Division of St. Louis Shipbuilding for a 30 day assignment that turned into a permanent position lasting more than 56 years and counting, so far.

I was basically doing production work and drafting during that time

before I was married. A great story, Donna was actually my blind date in 1962. A fellow that worked with me at the time was dating her girlfriend and Donna was in need of a date for a black tie affair and I was the blind guy," he joked.

Warner became the Vaporphase Division's Product Manager in 1964. he was promoted to Vice President in 1969, and in 1980, to President. He has spent his entire career (58 years total thus far) with one employer... well, not exactly one employer... "because later, in 1985, another fella' and I purchased Vaporphase from St. Louis Shipbuilding, and then Kickham Boiler took over Vaporphase in 2006."

Fast-forward to now, more than 30 years later, Warner continues to consult for the Kickhams in matters relating to Vaporphase, or waste heat recovery systems.

Speaking of those recovery systems, the power generation product that Warner has worked on for all these years actually has one specific application, and that is to recover waste heat from reciprocating engines. "Roughly only a third of the heat thermal input is being recovered as power, the rest either goes into the exhaust, the radiator for cooling or is radiated," he furthered.

The addition of a waste heat recovery system, such as Vaporphase produces, changes an engine installation to a co-generation system, where much of the normally wasted heat rejection is recovered and used for heating, absorption air conditioning or various processes.

Warner and Donna were able to visit EGSA Headquarters on one of their Florida trips to participate in this interview face-to-face. "We are really looking forward to welcoming everyone back for the 50th", Donna added.

Here is how our interview progressed that day in February in sunny Boca Raton, FL!

Warner, with 42 active years of EGSA Membership under your belt, how do you think New Members can benefit most from their involvement in EGSA?

Warner Bauer: "EGSA Membership is comprised of the leading manufacturing companies, distributors and dealers, as well as other top individuals in the electrical generating industry. Membership in EGSA puts you in contact with these leaders in power generation. I know that my company has found our EGSA membership invaluable.

The speaker programs have been very beneficial to me personally. Sitting on the various committees has helped me to grow both personally, as well as professionally too. As a first timer, I don't believe that people come in seeking lifelong friendships, but after

Warner Bauer

- EGSA Past President 2008, Leroy Carpenter Award

2011 and two-time Board of Directors Member

42 years with EGSA, I can say that some of my greatest personal relationships have stemmed from my EGSA membership."

Who was the most influential person in EGSA during your early years of membership?

Warner Bauer: "There were a number people that were influential. The first was John Ford of International Harvester (now Solar Turbine, Inc.) John convinced me to attend my first EGSA Conference at the Monteleone hotel in New Orleans in 1973. Some of my other notable and memorable members in the beginning were Tom Richards of Katolight, Jack Powell of Powell Controls, Don Panetta of Selkirk Metalbestos, Leo LeBlanc of Methane Power and Herb Whittall of Caterpillar."

Do you recall a story that epitomizes EGSA colleagues working together for the good of the industry?

Warner Bauer: "I believe the EGSA Committees and Working Groups epitomize EGSA Members working together for the common good. You have a variety of manufacturers, manufacturers' representatives, dealers, distributors all working together on those committees. Many are competitors who put aside that fact to work together, for EGSA. It makes Best Practices and EGSA Guides possible. Can you envision that recent Silencer Guide being blessed by EGSA and the Industry unless all of those competitors had pulled together?"

It sounds like you have a very favorable opinion of EGSA Committees, Warner. Do you recall what was your first impression of EGSA was so many years ago?

Warner Bauer: "Well to be honest with you, when I attended my first conference in 1973, EGSA was still a fairly young organization and the majority of member companies were dealing with mobile, standby and military power systems exclusively. Since my company deals in prime power systems, I was a little hesitant to join as a member; however, I did continue to attend conferences on a regular basis. In a few years, the membership increased to include more companies that were dealing in prime power systems, which convinced us to join in the late 1970s."

Where would you like to see EGSA headed in the next 50 years?

Warner Bauer: "I feel that EGSA is headed in the right direction with several of our programs like the 5th Edition of *On Site Power Generation*, our schools and our 2 generator technician certification levels (Journeyman and Apprentice). I think these programs are of great benefit to the dealer distributors, and as a result, to our industry. Continued improvement of the EGSA education program would be a great goal for EGSA.

I have also belonged to a number of trade organizations over the years and have found the EGSA Staff to be the best, well-rounded of all and with some of the recent additions, just continues to get better and better, which is also a great goal to have."

What do you enjoy the most about being a Member of EGSA?

Warner Bauer: "I have always enjoyed attending the EGSA conferences, even more so since the mid 1980s, because Donna has been able to attend with me. The EGSA Conference programs are always interesting and informative. Over the years together, we have made many lasting friendships with other EGSA Members such as Claire and Don Panetta, Herb and Nancy Whittall, Randy and Nancy Weimer, Charles and Helen Gould, Herb and Joan Daugherty, Charlie and Mary Gears, Ken and Judy Niekamp, Leo LeBlanc, John and Lessie Hawkins and Bill Dowling. The last two were fierce competitors for many years and while we did compete like crazy, over the years, we have really enjoyed our personal and professional friendships."

Did you aspire to be in a leadership position within EGSA, Warner?

Warner Bauer: "Not at first, I attended many committee meetings in the early years, but never in a leadership position. In 1986, Jack Powell convinced me to become the Chair of the newly formed Co-generation Committee back in 1986 and from there, I was hooked. I served on the EGSA Board of Directors from 1987-'89. After that I was approached several times to join the Executive Committee, however due to my heavy traveling demands and company work load I declined.

Then, I served on the Board again from 2002 until 2004 and later on the Executive Committee from 2005 until 2009, becoming EGSA President in 2008. I found my involvement very rewarding and never once regretted any of the positions I served with EGSA."

Any great rivalries or fun stories to share?

Warner Bauer: "I gave tennis a try once and decided it wasn't my game. Because of my heavy travel schedule over the years, I wasn't about to tell my wife, 'honey I'm going to play golf on the weekend or at the EGSA Conference.' Instead, I would spend the time with her and our EGSA friends touring the local sights.

If you read the Nov/Dec issue of *Powerline*, in Ken Niekamp's interview, he recounted the time in Vancouver when I approached Ken from behind, however I was not going for his wallet; I was going to swat his lower cheek. It was Ken's wife, Judy, who almost cold cocked me, thinking I was pick pocket! What makes it even funnier is that while I had known Ken for quite some time, I had never met Judy before that incident. After that trip, I was often the target of a lower cheek swat by Judy Niekamp. We had a lot of laughs over the years."

Can you recall a story on any of our products?

Warner Bauer: "Not so much a story, as it is a 50 year legacy in the making... the development of our Education Program was really the best thing that we have ever done; there isn't anyone, especially the dealers, who can't benefit from our book, our Rowley schools and EGSA Generator Technician Certification."

I also find *Powerline* very informative and for the young reader, our *On Site Power Generation: A Reference Book* is an excellent resource that keeps getting better and better. It truly contains a wealth of information for anyone interested in the electrical generation industry."

Did you bring your spouse to EGSA events?

Warner Bauer: "At first no, but Donna has attended conferences with me since the mid 1980s. There is one great story that stands out in my mind. I remember at the 1986 conference in Boston, Donna (my wife), Nancy Whittall, Claire Panetta, Nancy Weimer and Gloria Johnson were out shopping and sight-seeing, when they ran into non other that Tip O'Neil the speaker of the House of Representatives. Gloria Johnson produced her camera quickly and had a passer-by take a picture of the group with the Speaker.

After returning home, Gloria went to have the film developed only to find out she didn't have any film in her camera. So much for their photo with the Speaker of the House."

If you could tell a prospective member one thing about your experience as an EGSA Member, what would you impart to them?

Warner Bauer: "I feel that being a Member of EGSA has brought me multiple contacts in the industry that I never would have had, had I not participated. The benefit being able to become closer to many of my customers through EGSA membership has also been a blessing and professionally, we have acquired a number of representatives for the company via my EGSA membership. Again it's the networking available at the EGSA conferences. People like Dennis Roundtree, Dave Hurtado, Jack Powell, Mark Boulden and Dave Brewster, all great representatives who represented Vaporphase at one time or another. At least 5-6 of our guys came through our EGSA Membership. What was best about it was, I had the ability to stand back and see these people help shape EGSA before we hired them. It has been very valuable for me."



Top Left: Family man, Warner and his girls, in 1973.

Top Right: Recognize this dark-haired man? That's Warner in 1980.

2nd Row: Then and Now – Look at those 70s fashions...that's Warner and Donna. Always right in step! Speaking of right in step, here is a recent photo to share.



Bottom: No, this photo isn't a mistake! Looks like Nancy Whittall got her photo with Speaker of the House, Tip O'Neill that day!! We did a little digging to cap off Warner's story.



What about hobbies, Warner? We know you are still active in EGSA, but how do you spend your other free time?

Warner Bauer: "I would have to say that my main hobbies are boating and fishing with my grandchildren, who are all better fishermen than me. I also enjoy traveling with Donna and our friends."

We enjoyed sitting down with Warner and Donna in Florida and we hope you enjoy this interview. Warner is still very active in the association and he is super approachable. He is always ready to share an EGSA story!

Herb Daugherty

as well as our own EGSA Rowley School Manager

– ASCO Power Technologies, EGSA Past President 1992,

Discusses the Finer Points of Being an Active Member For More Than 36 Years Active 1979 to Present

Herb Daugherty is an EGSA icon. He and his wife Joan have been attending our events now for more than 36 years and he has carried a lot of banners for EGSA in that time. “I believe I have missed one convention in all of these years. It was either Tucson or Phoenix in the early 80s,” he laughs.



Joan has also attended almost every conference and convention over the years. Herb explains, “In the earlier years, we had a Spring ‘Convention’ held in a warm weather site, usually a resort-type location, and a Fall Technical ‘Conference’ held in September. In those days, the Fall Conference, did not have a golf tournament or a Banquet, so many wives did not attend. Joan usually did though, as did others, who became long time friends.”

This year, Herb is being recognized by EGSA for his tenure as a school instructor for 30 years. He is also in a very small number of people who have won the prestigious James Wright Education Award, which is an honor that EGSA gives only to those devoted to our education programs. Herb is also the current Manager of the Rowley Schools. In this position, he has made countless contributions to make our schools better, from course materials to instructor enhancement training. Herb is a real EGSA leader and he isn’t one to brag on his own accomplishments, he is too busy making progress to be tied down to fanciful things for his personal wall of fame.

In 2013, during our Spring Conference in Sarasota, our audience members reading this may recall how the story emerged onstage of how Herb met Joan. Because he is so fun-spirited, when our speaker that day, Charles Marshall, commended him for being the longest ‘married person’ in our audience, he also asked how they met. Herb replied matter-of-factly, “In the parking lot of a bowling alley,” and that got the crowd roaring with laughter. It also didn’t take more than an hour for that story to reach Joan ears and she also very matter-of-factly backed up her husband’s story with a smile. These two really make a complimentary pair.

Back to the story! In 1962, Herb married Joan. He also went back to school that year, having previously achieved an Associate’s Arts degree in Electrical Technology from Montgomery Junior College in Takoma Park, MD. He enrolled in the Newark College of Engineering, now known as the New Jersey Institute of Technology (NJIT). “I even missed my wedding rehearsal because I was registering for night school,” Herb confided. He later received his BS in Electrical Engineering in 1969, and received a Professional Engineer (PE) license in 1979.

Herb went to work (while still in school) for Lockheed Electronics, which as you might surmise, was a division of what would later be known as Lockheed Martin. Almost 2 years later (around 1963) he saw an advertisement for a job in Florham Park, NJ for ASCO Power Technologies. (Then, Automatic Switch Company).

ASCO was just starting in solid state controls at that time and they were seeking a design engineer. That position didn’t really capitalize on Herb’s strengths, so ultimately, he didn’t get the position. However, during the interview, they told him that they would keep him in mind for future opportunities.

At the time, Herb didn’t take much stock in that answer, but in January of 1964, they contacted him and asked if he would consider a sales training program for switchgear and Herb accepted. “The drive to Florham Park took a little over 50 minutes each way. I worked there for 35 years and never moved any closer, than when I started with them in 64,” Herb remarked.

With that, our interview begins!

Who was the most influential person in EGSA at the time when you were active? Why do you think that is true?

Herb Daugherty: “If I had to pick one individual who most influenced me when I first became active in EGSA it would probably be Tom Richards. Tom was President the year before I went on the Executive Committee and always was available with advice and guidance to me as a Board Member and Officer. He was tremendously knowledgeable in all areas of our industry and ready to help newer, younger members. Many other individuals come to mind. I’m afraid of listing them for fear of leaving some important individuals out, but..... I’ll do it anyway. In no particular order (just as they come to mind), DeWayne Babb, Jim Wright, Glynn Burchette, John Winbery, Art Coren, John Ford, Gary Kidwell and Gordon Johnson.”

What was your first impression of EGSA?

Herb Daugherty: “My first impression was ‘Wow’...these are all important people, and what nice places they go to.” My first convention was at the Don Cesar Hotel in St. Petersburg, FL. I made a presentation to the convention on “Peak Shaving.” I was so impressed with the organization, then called “EGSMA” (the M was for marketing, but everyone thought it was a skin disease.) I was determined to have my employer, ASCO continue to send me to meetings, so I immediately joined a committee (I believe the name at the time was “Electrical Components Committee) and volunteered to be Secretary. EGSA wrote standards at that time and our committee wrote standards on governors, voltage regulators, battery chargers, transfer switches etc.”

How do you think new Members can benefit most from their involvement in EGSA?

Herb Daugherty: “I would most likely advise new members and those new to the On-Site Power Industry in general, to follow the steps that I and other Past Presidents took: “Get involved” The experience an individual receives through involvement with EGSA is phenomenal. I can’t begin to explain how my much my career and personal development have benefitted because of EGSA.”



Top Left: Then – In 1962, Herb and Joan married in upstate New Jersey. Times were different then, Herb even missed his wedding rehearsal due to night school.

Top Right: The Daughertys enjoy traveling, here they are on a cruise off the British Isles in 2011.

Now – Not ones to rest on their laurels, Herb and Joan actively participate in everything they choose to do!

Where would you like to see EGSA headed in the next 50 years?

Herb Daugherty: “It’s hard to envision a growth which would surpass what we’re experiencing right now. Of course, technology will continue to change by leaps and bounds. Our technical committees and educational offerings will undoubtedly keep pace with and offer leadership to the industry through these changes.”



I look back to the *Powerline* issue when I was President and I note, that in my address I stated that we had lost 50 members (approximately 17% of our membership) the previous year. We were also coming off 3 consecutive years of financial losses. It’s obvious to see how much we’ve grown in the years since then, and I see that growth continuing with the dynamic membership, leadership, and staff we have.

What have you enjoyed the MOST about being a Member of EGSA?

Herb Daugherty: “Meeting new friends, without a doubt! So many, over the years too, it’s bittersweet to reminisce about the good times with friends who are no longer with us. It’s wonderful, when some of the old-timers come back, like is transpiring at this 50th Anniversary Conference.

I also feel that my greatest accomplishment during all of these years, the one I am most proud of, is hiring our current management team during my term as EGSA President. Jalane Kellough and the EGSA Staff have done a wonderful job managing us since 1992.”

Were you a Member of any particular Committee? If so, do you have a particular story you would like to share about that experience?

Herb Daugherty: “Many EGSA Committees! Let’s see, first there was the Electrical Components Committee. Later, I was the Chair of the Engineering Committee, which was comprised of the Codes & Standards Committee (forerunner of today’s Codes and Standards Surveillance Committee), the Standards Committee which actually wrote standards, and the Cogeneration/Environmental Committee.

As I mentioned, back then, we actually wrote standards and actually became an ANSI-recognized standards writing organization. ANSI is the American National Standard Institute – “Pretty Big Deal”

As far as a particular story, I recollect writing the standards on the old Electrical Components Committee and trying to make sure the standards

we produced were “generic” and didn’t favor a manufacturer over one who was not represented on the committee, or even in EGSA. It did make for very well-attended meetings, especially when your product’s standard was being discussed.

I also have fond memories of writing the Transfer Switch Standard along with Ken Dow of Russelectric. We cooperated very

well and produced a very good standard.

Later, I got involved with the C&S S Committee and the Education Committee. I can’t leave this topic, after mentioning the Education Committee, without saying a few words about my wonderful friend, George Rowley.

George did so much for this organization, by professionalizing the schools, developing the EGSA Technician Certification Program, improving our text Book and establishing the David Coren Scholarship Program. George was a kind and generous man and above everything else, a Gentleman (that’s Gentleman with a capital G as well as a gentle man).”

Tell us about your hobbies and interests outside the Power Generation Industry. They can be past hobbies or what you are up to at the moment!

Herb Daugherty: “Not too many, outside of work and EGSA. I do play golf, although most of those I’ve played with would dispute that. Before I moved to Florida, I grew some pretty nice roses, as well as some great Jersey tomatoes (always the best). I also dabbled in politics. I was a councilman in my home town of Edison, NJ, and spent 20 years as a Commissioner on the Middlesex County (NJ) Utilities Authority.”

We certainly enjoyed sitting down with our 28th EGSA President, but then again, we get to do this several times a year with Herb and it just doesn’t get old! We want to close with one more story about Herb.

In 2011, EGSA Staff developed a generational quiz that would be handed out to our members in Baltimore during the General Session. Since our keynote speaker’s topic was how to be productive among the generations, it seemed to fit. The Communications & Conferences Committee went to great lengths to make the questions (and the answers) hard to Google. At the end of the day, when the responses were being graded for the prize, there was only one quiz turned in with 100% accuracy and that one was Herb Daugherty’s. Interesting side note, Warner Bauer was 2nd Place, with only one answer wrong.

Take from this story what you will, and look for Herb and Joan in Jax!

John Winbery

- EGSA Past President 1996

Our Distinguished Southern Member from Louisiana Shares His Big Fish Story and Provides His Marine Perspective When He Envisions EGSA's Future Active Member - 1975 through 2006

John Winbery graduated from Thomas Jefferson Senior High School in Port Arthur, TX. He attended Lamar University in Beaumont, Texas for 1-1/2 years prior to transferring to Texas A & M University, where he received a Bachelor of Science Degree.



After graduation, John served two years in the US Air Force as a 1st. Lieutenant, where he received an extensive electronics education and became an electronics officer. When he completed his service to our Country, John moved on to his first civilian job at McIntosh Marine Service Co. as an Assistant Chief Engineer in Beaumont, TX, where he did extensive shipboard and offshore oil industry electrical system design. After two years there, he was promoted to Manager of the Switchgear Division, and served in that capacity until he resigned in 1962 to start Consolidated Switchgear & Electrical Systems, Inc., DBA Con-Select.

John's firm, Consolidated Switchgear and Electrical Systems, Inc. was a highly diversified manufacturer of electrical switchgear. His company designed and built switchgear and controls for onshore and offshore oil drilling rigs, offshore oil production platforms, offshore oil support vessels of all types and drillships, petrochemical plants, refineries, electric utilities, prime power electrical generation facilities, emergency standby power systems and cogeneration plants operating in parallel with utilities. John served as its Founder, President, CEO and Board Chairman, until the company was sold in November, 1982. He continued, under an employment contract as its President and Chief Executive Officer until November, 1984.

From early 1985 to September, 1996, John was a consultant who specialized in electrical switchgear and related generation systems for all types of applications. Through his consulting firm, Power Technology Associates, he served as a consultant and manufacturer's representative to various manufacturers. John also was an electrical systems consultant to architects and engineers including naval architects/engineers and to the legal profession in an expert witness capacity. During part of this period John owned a large pleasure boat business selling a variety of boats including Chris Craft Yachts.

In 1987, John also became the founder and President of Consolidated Switchgear, Inc., a company primarily engaged in the design,

manufacture and supply of custom offshore, marine and industrial electrical power and control equipment while he continued his consulting business.

From 1987 through 1995, John was also the only Switchgear Systems Specialist for the Automatic Switch Company, ASCO, and provided field technical support to all of ASCO's sales offices and Reps across the US.

In 1996 John prepared a business plan for the sale of Consolidated Switchgear, Inc., which resulted in the acquisition of that company by a larger company. As a condition of this acquisition John was required to sign an exclusive three year employment agreement with Con-Select, Inc., the successor company, as its President and Chief Operating Officer. After serving in that position for three years and eight months, John terminated this employment agreement to return to the independent consulting business. "Winbery and Associates" included experts in a variety of disciplines associated with electrical power generation such as prime movers and generators.

John is EGSA's 32nd President and he brought many things to the table in this role. First and foremost, he brought his lovely wife, Carolyn, who is a lifelong friend of many of our EGSA spouses and significant others. He served on the Executive Board and was also the Chair of our Distributed Generation Committee. John authored the chapter on generator switchgear in the EGSA reference book, "On Site Power Generation - Fourth Edition." In 2002, John received the Carpenter Award for his long and outstanding service to the Association.

John has also served the industry in several undertakings. He is a Life Member of the Institute of Electrical and Electronic Engineers, IEEE, a voting member of the IEEE Standards Association and a member of the IEEE Industry Applications Society as well as a member of IEEE PCIC, Petroleum and Chemical Industry Committee. He worked on the chapter on switchboards for the 1998 revision to IEEE-45, Recommended Practice for Electrical Installations on Shipboard. He also served on the IEEE-45 2002 revision committee and is currently Vice Chairman of the switchboard working group for a new revision of the book on switchboards, IEEE-45.7, that was published May 12, 2012. He also is a past member of the American Arbitration Association, where he was appointed to the Panel of Arbitrators.

The Winberys are coming to our 50th anniversary and we hope that you will enjoy this interview!

Who was the most influential person in EGSA at the time when you were active? Why do you think that is true?

John Winbery: “The most influential person in EGSA while I was active was Herb Daugherty. If Herb was not the most conscientious person about his participation in EGSA, he was certainly close to it. His attitude and demeanor was always excellent. He was always concerned about any problems his fellow members had and tried to help them cheerfully in any way he could. Herb works diligently to this day at every job he accepts from EGSA and also continues to try to accept as many jobs as he can, into his retirement.

At the same time, Herb encourages other members to participate as best they can. He has turned around the attitudes of many members that joined with only their personal business interest in mind. He has convinced others to develop an attitude of trying to contribute and share for the greater good of the membership and the organization as a whole. His list of EGSA accomplishments are many; among them are notable mentions such as:

- Chairman of Electrical Components and Controls Committee
- Chairman of Engineering Committee
- An author in several editions of “On Site Power Generation”
- Represented EGSA on NEC code panel 13, NFPA 99 and NFPA 110 committees
- Represented EGSA on UL 1008 (Automatic Transfer Switches)
- Represented EGSA on IEEE 1547
- Was an EGSA Instructor 1985-2015 (Received one of the first James Wright Educator Awards in 2000)
- Current Manager of the Rowley School
- EGSA President in 1992

What was your first impression of EGSA?

John Winbery: “My first impression of EGSA was not as good as it should have been. At that time in our history, EGSA was run by a close knit group consisting of the Association Management, Officers and Directors who were friends that hob knobbed exclusively with each other most of the time. I was of the opinion that the rank and file members, like me, were there to see what they could do to accomplish their own goals—everything from influencing other Members to do business with them, to finding out who their competitors and customers were. In other words, just there for a selfish profit motive. Then along came the revolution! The Association Manager was released from his duties and the current management team was brought in to motivate and manage building the great organization that EGSA has become today. Personally, I feel that we could not have a better Executive Director than Jalane Kellough, who is continually directing EGSA to greater growth and influence in our indus-



Top Left & Right: Then and Now – John as a young man, after his service to our Country and Now, as he is today!

Bottom Left & Right: John and Carolyn Winbery then and now.



try. It also seems that now, most of our members have a positive attitude and a willingness to help grow our industry overall.

There was also a memorable “first impression” story that happened during my initial meeting of the Executive Committee. We were in Key Largo for drinks after the first day’s meeting and I ordered way too many barbecued chicken wings. I still get ribbed about that to this day by Herb Daugherty and Glynn Burchette. Some things just stick in your mind and have a way of repeating themselves, as the years go by.”

Where would you like to see EGSA headed in the next 50 years?

John Winbery: “We have done a good job in “land based” on-site power generation and will continue to keep up with developments in that area. It is my opinion that now we need to take a big step into the marine industry, where all vessels of any size must have prime power engine generator sets.

The extent and diversity of the marine generator market is growing rapidly worldwide. Many of our dealers that have shipyards in their franchise area have been taking advantage of this growing market.

We all know the challenges to get land based architects, engineering firms, owners and contractors to join EGSA. We could possibly have more success with these categories of member firms in marine applications because the marine industry power generation needs are for prime power instead of mostly standby. Electrical power aboard a vessel is the life blood of their operations. Vessel owners, naval architects, shipyards, marine electrical contractors and field service companies all have a critical interest in on-board power generation.

In the future, I envision vessel owner/operators, some shipyards and field service companies will all need to be sending their electricians to our Rowley schools. The electrical power requirements for all types of vessels from tugboats, articulated tug / barge combinations, ferries, off-

John Winbery

- EGSA Past President 1996

shore oil workboats, offshore drill rigs, military vessels (Navy and USCG) as well as passenger vessels of all types are growing exponentially. One of the great drivers of the need for more and larger continuous duty engine-generator sets on shipboard is the rapidly increasing use of diesel electric propulsion. Previously, large diesel engines were directly connected to the vessel's propellers with steel shafts and gear boxes. This necessitated locating these large diesel engines in the rear/center part of the vessel. With diesel electric propulsion, multiple generator sets can be located in convenient locations anywhere in the vessel and electric cables run to motors located near or at the propellers.

Diesel electric propulsion has been favored by the offshore oil industry for some time and now the military is using it as their preferred propulsion method. At this time, two large shipyards are competing under a design contract that will determine if they get to build 22 new diesel electric propulsion Offshore Patrol Cutters for the USCG. Large cruise ships have long used electric propulsion with generators driven by large turbines. Now smaller cruise vessels are using diesel electric propulsion. Viking Cruise Lines, presently operating in all major rivers in Europe and Asia is going to build in the US at least six 400' Mississippi River cruise vessels and maybe as many as twelve. Each of these vessels will have two ship service and 3 propulsion generators. In diesel electric propulsion vessels, ship service and propulsion electrical power is generated by multiple prime power generator sets. The smaller electric propulsion vessels use 480 and 600 volt alternating current generator sets where the larger vessels I have worked with used medium voltage ac generators up to 12,470 volts. There is also a lot of work being done by members of IEEE 45 working groups to develop standards for medium voltage direct current propulsion also. IEEE 45 is the "Recommended Practice for Electrical Installations on Shipboard".

As an aside, I bring this up because I am very familiar with the subject. I am Vice Chairman of the Switchboard Working Group of IEEE 45 and we did not include applications using medium voltage direct current in our latest revision P45.7, 2012 edition. Our switchboard working group chose to stick with ac current until more of the dc requirements are defined. DC application recommendations are being pushed by the military."

How do you think new members can benefit most from their involvement in EGSA?

John Winbery: "Obviously, the learning experience is unparalleled. The educational sessions on a broad range of issues impacting today's On-Site Power Industry offer unparalleled insight into what affects our businesses. Additionally the committee of their choice can keep them up to date on subjects that are important to their occupation in the industry.

Do you have any great fun stories to share, John?

John Winbery: "I do have a good one! You might even say it is a "big fish" story! At one of the Florida conventions, EGSA had a fishing tournament with a prize going to the fishing team that caught the biggest fish from one of the resort property lakes. Joey Carriere and I, along with our wives, went driving around the area sightseeing. When we passed a seafood market, we had a flash of brilliance. After checking the various whole fish the market had in their refrigerated cases, we bought a five pound drum (salt water fish for those who don't know). We carried the drum to the evening dinner and closing ceremony presentations function and entered our drum in the fishing contest. After everyone thought we had won the biggest fish contest, we admitted our ruse and got laughed off the stage. It was a fun memory we all shared in!"

Tell us about your hobbies and interests outside the Power Generation Industry. They can be past hobbies or what you are up to at the moment!

John Winbery: "Since childhood, when I was in the Boy Scouts, I have always enjoyed fishing and hunting. This included salt and fresh water fishing and I grew up loving to duck hunt from my high school days on. Later, I added deer hunting but have since regretted it as they are such beautiful creatures.

I have always been a power boating enthusiast and we once owned a pleasure boat sales and service company. I started water skiing in my teens and later my wife, Carolyn and I really enjoyed snow skiing as well. We loved to travel in the contiguous US, Canada, Alaska and around the world. We once made an airline trip completely around the world in one business trip from the US to Singapore to England and back home. We have enjoyed cruises in the Caribbean, to Alaska, Northern Europe, and the Mediterranean. In the US and to the Bahamas I enjoyed flying our own airplane around the country on business and pleasure as a private pilot. We initially owned a 4 place Mooney Super 21 and later moved up to a 6 place Piper Saratoga SP. We enjoyed the Bahamas for island hopping in both our airplane and a 26' live aboard cabin cruiser boat that we could trailer from our home in Louisiana to Florida and launch at Singer Island. We took up golf later in life and we played at home where we live on a Country Club golf course. Naturally, I played at the EGSA conventions we attended as well."

We look forward to hosting John and Carolyn in Jacksonville! Make sure you have a chance to connect with John Winbery, especially if you have an engineering interest in marine power generation!

Jack Rogers

– EGSA Past President 1997

EGSA's 32nd President, Who Came to be Known as Our "Keeper of the Coins" Sits Down to Discuss His EGSA Membership Active Member from 1982-2009

Jack Rogers is EGSA's 1997 Past President. He graduated from Oklahoma State University in 1965 with a degree in General Business with minors in Economics and Political Science. Following his college graduation, he went to work for Frank Murphy Manufacturer, Inc. in Tulsa, OK as their Pricing Clerk.



Frank Murphy Manufacturer, Inc. is one of EGSA's oldest Members, dating back to the first EGSMAs Buying Guide, which was 1967. After a couple of years, Jack moved into Sales, concentrating on the OEM industrial markets and International sales. Over the years, he also held management positions in both Sales and Marketing. Much of his time in later years centered around the various support aspects for Frank Murphy Manufacturer's marketing efforts which included trade shows, publications, advertising, etc. He also held management roles in training and supporting their distributor network. As Jack put it, "Being a small manufacturer, we all took on other tasks as necessary and one of my additional tasks was to handle accounting for our small assembly plant located just outside Houston, TX."

After a 42-year career with F.W. Murphy, Jack retired in June of 2007. He and his wife, Carolyn still reside in Tulsa and both keep busy with their hobbies. Jack enjoys radio-controlled model planes these days, along with golf and carpentry. "I also enjoy wood working and have been doing some "remodeling and updating" of our home," he adds.

Carolyn, Jack's wife is a Master Gardener. Carolyn started coming to EGSA conventions early on, after her retirement as a pre-school educator. "One of the most enjoyable and positive attributes of EGSA is the encouragement for spouses to attend and participate in various EGSA activities. We both have gotten acquainted with and become good friends with many members and their spouses – something we hold near and dear." he added.

They have one grandson in Colorado who also keeps them busy!

Editor's Note: Although the official name of the company in early years was Frank W. Murphy Manufacturer they were better known in the industry as Murphy Safety Switch or simply as Murphy Switch for their line of automation and shutdown devices for engines and their driven equipment. In later years, the name was shortened to simply FW Murphy. The company is now the flagship entity for Enovation Controls.

Jack joined EGSA in and around 1982, and continued his activities with EGSA into retirement. He served on the EGSA Board of Directors from 1990 until 1993 and served on the Executive Committee from 1994 through 1998.

He was an active member of the Standards Committee (which ultimately became the Codes & Standards Surveillance Committee). "I recall that I was just getting my feet wet in EGSA, when I learned that there was a vote scheduled on a proposed performance standard authored by one of our main competitors. When I read it, it became abundantly clear that it was little more than a slightly altered version of our competitor's product specifications sheet—which was a direct violation of the Committee's stated direction at that time. It was at that point that I "officially" joined the Committee! In the end, we worked out a compromise and I still enjoy a great relationship with those individuals, even though the competitor no longer exists," Jack added.

Who was the most influential person in EGSA at the time when you were active?

Jack Rogers: "This is a tough question because there were so many who had so much to draw from. Not being the brightest bulb on the string, I always tried to learn something from everyone. Certainly the Gordon Johnsons and the Jim Wrights of the organization had an impact on me, and I had the good fortune to benefit from following the lead and examples set by my immediate predecessors.

For example, I learned some time later that Tom Richards (Katolight) had set the wheels in motion with his nomination that I join the Board (or nominated to be an officer – not sure which), so without question, he had a great impact on whatever small part I may have contributed to the good of EGSA and for how I matured, as a business professional and human being.

Speaking of Tom (who passed away a few years ago) there was one message that has stuck with me that occurred during one of his Presidential presentations. I may have twisted it a bit to fit my personal beliefs and experiences, but nevertheless here's the gist of his message. Tom was a pilot and he gave an example of accentuating the positive and how no matter how dismal things may seem at the time, that there's a positive out there just waiting to be uncovered.

His example was climbing into his airplane on a dark and dismal overcast day with no foreseeable improvement, and uncertainty as to what to expect once he was airborne. But then, voila! He climbed out of the stormy overcast into bright sunshine and blue skies for as far as he could see. Had he succumbed to the weather on the ground, he would have just gone back to bed and would have missed the positive experiences he had on top.

There really are just too many of my colleagues who have had some influence on me to just name one individual, but Tom has to be high on that personal list for me."

Jack Rogers

– EGSA Past President 1997



Top Left: Jack & Carolyn on vacation in 2008.

Top Center: Jack in 2010.

Top Right: Jack on the beach at EGSA's 2007 Spring Conference in Savannah, GA.

Bottom: Herb Daugherty must have taken this photo. Pictured (L to R), lifelong friends Warner Bauer, Carolyn Rogers, Donna Bauer, Jack Rogers, Joan Daugherty, Jim Wright, Carolyn and John Winbery.



What was your first impression of EGSA?

Jack Rogers: "I first learned of EGSA back when it was called EGSM – late '60's – early 70's - when the organization was just getting started. Fresh out of college, I was that snotty nosed kid who tagged along with his boss to some early conventions.

I was in total awe of all aspects of the group, the processes and the vast array of knowledge among the membership. As things progressed and I began to take on more of my employer's main representative role – and regularly attend conventions – what stood out most was how difficult it was to blend into and become a participant in the group. Mind you, the organization was still somewhat in the development stages.

I really got more involved in the early 80's and found it was still somewhat difficult for new members to easily assimilate. That whole process was later addressed and largely put to bed when we established the New Members and First Timers Reception. I think that is when we became more inclusive."

Where would you like to see EGSA headed in the next 50 years?

Jack Rogers: "Fifty years may be somewhat of a stretch for planning purposes, but it's certain that reliance on dependable electrical power will continue to be so very important. The need is growing more prevalent every day. Just try to get along with a somewhat normal life, for even a short period of time, when there is an electrical outage.

We're faced with mounting pressure from any number of sources to provide cleaner, greener power, so I think that for EGSA to survive, the organization must continue to recognize and include providers of alternate drivers such as wind and solar power, perhaps nuclear, fuel cells, wave power and whatever else comes down the pike that results in less pollution and increased reliability."

How do you think new Members can benefit most from their involvement in EGSA?

Jack Rogers: "Simply put: Get involved! Join a committee, attend conventions, meet and greet other members and get to know them not just on a professional level, but get to know them as an individual.

Do you recall a story that epitomizes EGSA colleagues working together for the good of the industry (not just themselves or the firms that they work for)?

Jack Rogers: "I think the "story" is EGSA itself. Here, you have competing manufacturers, dealers and distributors, service providers, users – in fact anyone who has even a passing interest in on-site power – all working cohesively to advance technology, and the application of technology to the on-site power industry."

What did you enjoy the MOST about being a Member of EGSA?

Jack Rogers: "Certainly becoming more knowledgeable about all aspects of the power generation industry was highly enjoyable. One of my biggest EGSA challenges/accomplishments was authoring the Controls Chapter in the first edition of *On-Site Power: A Reference Book*.

Personally, Carolyn and I both were very fortunate to associate with and become good friends with so many members and spouses. She started coming to EGSA conventions early on after her retirement as a pre-school educator. One of the most enjoyable and positive attributes of EGSA is the encouragement for spouses to attend and participate in our various EGSA activities. We both have gotten acquainted with and become good friends with many members and their spouses – something we hold near and dear. All in all, I enjoyed my total experiences in EGSA.”

Did you ever aspire to be in a leadership position within EGSA and if so, what role and why....or if not, can you share the reason why?

Jack Rogers: “Aspire? That wasn’t really on my radar screen. But I never backed away from accepting a role, to whatever degree it might have been. My basic belief toward any endeavor is that you get back much more than you put in, and if you’re along just for the ride you’re not doing a service either to yourself or to the organization. I guess it’s just my nature that if I’m going to join an organization I’m not satisfied to just go along for the ride.

Leadership can take on many different faces and many times working off-grid is more productive to the good of the group than being out front as an officer, etc. I thoroughly enjoyed my tenure on the Board and as an Officer, and was more than happy to serve, so if that constitutes aspiring to be in a leadership role, then, I’m okay with that.”

Any great rivalries or fun stories to share?

Jack Rogers: “There certainly was a lot of good natured ribbing between the tennis and golf contingents, and there were some really fun awards to come out of those rivalries. The “Pablo y Pablo” exchanges between Paul Dolinar and Pablo Arena were a real hoot. In a recent conversation with Don Panetta, I was reminded of a “situation” that evolved out of our Board meetings during Glynn Burchette’s and then Don’s tenures as Board Members and as Presidents. Up to that point, our Board meetings had always been, shall I say “spirited”?

We had a lot going on at that time and the tempo was ramping up at a fairly rapid pace. It was a productive group of members with some great ideas, all of whom wanted to get their story told – all at the same time!

It was all poor Don could do to keep the meetings under control and hold the speakers to one-at-a-time. Bottom line is that we agreed that if you butted in or spoke out of turn you had to put a quarter into a pot. Well, that created another problem – how were we going to corral all of those quarters and get them from one meeting to the next.

As the low man on the pole, I was charged with taking care of that task. Whether I was the one who came up with the solution or whether it was given to me, I don’t recall. Nevertheless, I wound up with this big – about twice the size of a football - orange colored plastic pig which we turned into a piggy bank. The stares and giggles I got carrying that pig through the airports and onto the planes were something to behold. But then, it got even better when at one Board meeting during Don’s tenure as President he had to call on Gordon Johnson to donate to the pig. I’ll leave the rest of that story for Don to tell, but a priceless memory.”

If you could tell a prospective member one thing about your experience as a Member, what would you impart to them?

Jack Rogers: “If you are serious about everything that is on-site power generation, then you need to join with other individuals and companies who share the same interests, and get involved with EGSA. My EGSA experience has probably been the most rewarding of any other industry group to which I have belonged. For me the personal relationships that developed over the years is something that I hold in very high regard – even with some of our (FW Murphy’s) most staunch competitors. They’re really not bad people – just misdirected! Ha Ha! The other thing I would say to a prospective member is, get involved in whatever you can at whatever level that is comfortable for you.”

We thoroughly enjoyed our time with Jack Rogers and we hope that you will too, as he and wife Carolyn will be attending the Spring Conference to celebrate our 50th! We look forward to seeing them both there.

James Wright

- EGSA Past President 1990,

EGSA Reference Book Author

Forefather of EGSA Education Programs and the Namesake for our Education Award, sits down with EGSA for an Interview Active Member 1973-2012

While talking with Jim Wright on the phone, you would never pick up the fact that he thinks he is an education forefather for EGSA, but he certainly is! Our conversation started somewhat like this, "Ike Davidson repped for Lima Electric and both of us were heavily involved with the Education Committee. We decided at some point early on that we really needed to increase the professionalism of EGSA (former acronym) and the singular best way to do that was to educate people in our collective mindset.



We began envisioning a traveling schoolhouse. That first school was held in 1982 and from that point on, I taught all of the classes on Basic Electricity and Generators for the next 25 years or more," Jim reveals.

"Once we had established the traveling classes concept and gotten that approved, we determined that in order to keep the costs down, every other class was held at EGSA Headquarters, which at that time, was in Coral Springs, FL. We kept the classes to 30 students; with 25 being the ideal in my day, and it was also the number we needed to teach in order to cover expenses."

He continued, "The next step for us was to get instructors for the classes from Member companies, and since we didn't have our reference book at the time, each instructor brought his own course materials to cover each of the modules. The biggest challenge was to institute consistency between the classes and remove the company affiliation from the materials. If you asked me what brought our reference book to light, I think this was a contributing factor, because in 1986, the Education Committee decided that a reference book was the next order of business."

He made it sound so easy...and also so, matter-of-fact, but Jim Wright was one of our forefathers of the EGSA Education Program and there isn't much he doesn't know about the history of how we got here 50 years later!

Our interview continued.

Who was the most influential person in EGSA at the time when you were active? Why do you think that is true?

Jim Wright: "I would have to say Gordon Johnson of Kohler Co. gets my vote for most influential. Gordon was the style editor of the first three editions of *On-Site Power Generation* (EGSA's reference book). Without his guidance and advice, our industry's most valuable educational tool might never have been published.

We volunteered many of our EGSA School Instructors to author those original chapters and then Gordon edited them. That first book was published in 1990 (when I became EGSA President) and as it grew, we added chapters, updated chapters and some never changed...like the Basics of Electricity never changes. As they say, 'Like Topsy, the book just grew,'" he shared.

Do you recall a story that epitomizes EGSA colleagues working together for the good of the industry (not just themselves or the firms that they work for)?

Jim Wright: "When Ike (Davidson) first began compiling and reviewing all of the handouts that were provided by our Instructors, we had to sit on some of them (instructors) to prevent their class from being an informal. That being said, for the most part, all of the instructors worked very hard to make their class of real value to the students. We would get together before and after each school to discuss ways that we could improve the experience of the students."

What did you enjoy the MOST about being a Member of EGSA?

Jim Wright: "It might sound a little out-of character, but the thing that I really enjoyed the most was the "bull sessions" after hours. We told horror stories of field experience, and how we managed to solve problems. These experiences spoke to me, because believe it or not, the "horror stories" were good learning experiences for what to do, not to do, or how to get a customer unstuck.

Discussions of problems, solutions and product application meant a great deal to me in my day-to-day operations. That was the fun part... we'd make jokes, kid each other quite a bit, but the camaraderie that you would feel was great. I enjoyed technology discussions, not proprietary of course, with guys from all the major manufacturing members, and through discussion like these, best practices in applications for your products emerged. If we talked about it at the schoolhouses, we discussed it with our colleagues."

Any great rivalries or fun stories to share?

Jim Wright: “‘Competition is good for business’, as Darwin said, so when we would go to EGSA conventions, there were two established No-Nos. First, you did not discuss price and secondly, you did not reveal company secrets. I won’t say that there were not rivalries, but I think that at that point in EGSA history, we had too much memorable work being accomplished to have time for memorable rivalries. In On-Site Power, folks seemed to stick around our industry once they landed here. Whether Members changed jobs within the industry, such as moving from manufacturing to distribution, to being hired away by a competitor, or there were those of us who stayed with one employer for our whole career, the Association grew right along with us.

I have also been fortunate enough to see students of both my company training schools and EGSA schools, grow within our industry. Vaughn Beasley is a great example! Years ago, we held a school at Ring Power Corp. and Vaughn participated in that school very early in his own career. From time to time, Vaughn would give me a call and ask me where he could find a particular piece of information. Now Vaughn is a Past President of EGSA! This always made me feel good to help my fellow Members, regardless of company branding. This is also a fine example of a member knowing where to go, to get what they need answered.”

If you could tell a prospective member one thing about your experience as a Member, what would you impart to them?

Jim Wright: “I would suggest that for their personal and professional development that they join at least one EGSA Committee, and become involved in its operation. Working with fellow Members of different companies and products will broaden your knowledge, and thus improve performance and promotion possibilities. You should also pay close attention to EGSA speakers. Learn, gather papers, network with fellow Members and study! That is how you get great at what you do.

I also learned from experience that when you begin to write something, the author learns more than the student. If you are going to present (to other EGSA Members), you have to research and make sure that you are accurate before you take to that EGSA stage, so the end result is that you learn more than you teach. You even get others to review it, so that your accuracy grows and your work is refined and succinct. I bet if you talked to any of our other book authors, you will find the same answer. The subject of Generators has changed somewhat, but my naval stand on the Basics of Electricity is theory that won’t change. I used to joke to the students of my classes - ‘What is in the book is right, cause Wright wrote it!



Left – Jim and his granddaughter, Audrey, enjoying a day together at the Cleveland, Ohio Zoo.

Right – Jim and his friend, Annie, at Jim’s Marathon retirement party.

Tell us about your hobbies and interests outside the Power Generation Industry. They can be past hobbies or what you are up to at the moment!

Jim Wright: “I have been a member of The Elks (BPOE) here in Wausau for 22 years. Since I retired, I have become more active in their youth and community activities. This is a good reason to get up in the morning.

Jim Wright is coming to our 50th Anniversary in Jacksonville this month! In fact, by the time you are reading this article, he will be there. Other than Jim’s service to our education program, Jim was also a member of two other committees during his tenure with EGSA, Technical and Standards and the Legislative Committees.”

Jim received his BS in Nautical Science, and a commission as Ensign in the US Naval Reserves from the U.S. Merchant Marine Academy, Kings Point, New York. As he put it, “I sailed for a couple of years as a 3rd mate with the United Fruit Co. hauling bananas out of Central America to New York, Baltimore, Philly and Charleston, or on coast-to-coast runs from East Coast ports to West Coast ports such as LA, San Fransisco, and Seattle and then back around to an East coast port.

“My ship was in Seattle when I received my draft notice, so I requested the Navy to activate my commission (as an Ensign) in the Navy. I served the two year commitment, liked the life, and stayed for an additional 7 years, until I met my lady and came ashore,” he added.

After his service to our Country, Lima Electric was advertising for an inside sales representative for generators. With a degree in Nautical Science and not much else of real use to the Industry, Jim was very complimentary to the people that brought him along in the industry and probably decided then that he would pay it forward for years to come through his service in EGSA. He went to his first EGSA event in 1972, you could say that his blood runs EGSA Reflex Blue and we’d believe.

Thanks for the great interview, Jim!

Having Trouble Receiving Your EGSA Emails?

We have, from time to time, received inquiries regarding difficulty in receiving EGSA emails. The reasons are varied and can be easily remedied and others are more complex. We have outlined some of the more common reasons below for your convenience.



Some simpler reasons for emails not appearing in your inbox:

Did you incorrectly type your email address when entering your contact information? Just one incorrect keystroke will cause an email to go to the wrong address and make it undeliverable.

Have you checked your Spam/Junk folder? Your spam filter could direct EGSA emails there. If, when you open your Spam/Junk folder, you see an EGSA email, simply open the email and click on "Mark as Wanted" in the tool bar above the email message. This will alert your email program that you want future EGSA emails to be directed to your inbox.

Have you or your company set up other filters? If you've set up filters, the message from EGSA might be going to a different folder instead of your Inbox.

Now, for the more complex reasons for blocked emails:

To resolve some of the more complex issues, it may be necessary to get your company's IT department involved. Companies employ filters and/or blacklists to protect you from unsolicited email; however, this can make it impossible to receive newsletters, announcements and promotions that you have requested. EGSA has set up a link on our website to help resolve this type of problem. We have even included a letter to help you communicate the problem to the proper department within your company to resolve it. Visit www.egsa.org/Membership.aspx for further details and troubleshooting. ■

Do you display the EGSA member logo on your website?

Membership is a two-way street! One of the privileges of EGSA membership is to identify yourself in the OnSite Power Industry as a trusted resource by using the membership logo on your company's advertisements, website, business cards or stationary.

Including the EGSA logo on your site lets people know that:

- Your company is committed to staying on top of the industry news that's important to your business;
- Your membership shows you have a voice and are committed to staying active within the onsite power community; and
- Your company sets itself apart from its competitors.

Be a part of the marketing efforts of your membership and let EGSA's reputation work for you! Please download the EGSA logo and proudly display it on your company's web site and collateral materials.

To get the logos, please visit: www.egsa.org/Membership.aspx. ■

Whether You Are Seeking New Talent or Looking for a New Career, We Make the Job Search Easier with the EGSA Job Bank!

This Process Allows Members to Control Their Listings

One of the great benefits that you enjoy as an EGSA Member is access to the Job Bank. Posted on the EGSA website and bi-monthly in each issue of Powerline Magazine, the EGSA job bank boasts more than 60 job postings at any given time. (Online & Print)

The EGSA Job Bank is managed exclusively online via our web site. We are giving you the power to directly manage your own job postings. Choose how long the ad should run, whether the ad should run in Powerline Magazine and edit it whenever you need to. This streamlined process means you manage your listings.

Online Job Bank The Directions Are Easy! To Post a Job:

- Log onto the job bank* at <http://www.egsa.org/Careers.aspx>
- Click on "Add New Job Opportunity."
- Fill in the job information

For your job posting, you will see "delete" and "edit" buttons below the posting. Use these if you need to edit the posting at a later date. (Ads run online for 60 days unless edits are made to update the listing.)

To review all of the career opportunities that our Members have available, simply visit www.egsa.org and click on the Careers tab! Remember - Job Bank postings are one of the FREE benefits of EGSA Membership.

EGSA Membership can save you money on job placement advertisements; show this article to your HR Department if this service is not one you are currently utilizing!

For questions, call EGSA staff at 561-750-5575 or visit www.egsa.org/Careers.aspx for complete instructions! ■



*To create an EGSA login, please visit www.egsa.org and click the green "register" link in the upper right-hand corner. The minimum information required is your name, company name, company email and the creation of a password. (The password must be 8 characters long, must contain letters and numbers and also include one upper-case letter)



Application for Membership

ELECTRICAL GENERATING SYSTEMS ASSOCIATION

1650 South Dixie Highway, Suite 400, Boca Raton, FL 33432 • 561-750-5575 • FAX 561-395-8557
 E-Mail: e-mail@EGSA.org • Website: www.EGSA.org

Under the leadership of its Board of Directors and operating through its various committees and staff, EGSA strives to educate, provide networking opportunities and share relevant knowledge and trends with industry professionals including manufacturers, distributor/dealers, engineers, manufacturer representatives, contractor/integrators and others serving On-Site Power consumers.

EGSA MEMBER CLASSIFICATION & DUES SCHEDULE (Choose appropriate membership below and enter amount in box #3 on reverse)

FULL MEMBERSHIP		Annual Dues	Initiation Fee	TOTAL DUE	
<input type="checkbox"/>	MF Manufacturer Membership Any individual, sole proprietor, partnership or corporation seeking membership must apply for a Full Membership as a manufacturer if they meet one or more of the following criteria: 1. They manufacture prime movers for power generation. 2. They manufacture generators or other power conversion devices producing electricity. 3. They manufacture switchgear or electrical control devices. 4. They manufacture or assemble generator sets, UPS systems, solar power, hydropower, geothermal, or any other power production or conversion system including related components or accessories for national or regional distribution. 5. They are a wholly owned subsidiary of a firm that qualifies under rules one through four.	\$870	\$200	\$1,070	
<input type="checkbox"/>	DD Distributor/Dealer Membership Any individual, sole proprietor, partnership or corporation actively engaged as a distributor or dealer for products listed under Manufacturer Membership may apply for Full Membership as a Distributor/Dealer. If an organization qualifies under Manufacturer Membership, it is not qualified under this section.				
<input type="checkbox"/>	CI Contractor/Integrator Membership Any individual, sole proprietor, partnership or corporation actively engaged as a Contractor or Equipment Integrator of products listed under Manufacturer Membership, not bound by brand, geographic territory or contractually obligated as a Distributor/Dealer of a specific product. These firms typically purchase products from a Distributor/Dealer, Manufacturer or Retailer, adding value through installation, product knowledge, relationships, unique services, etc., and then re-sell the resulting product to an end-user.	\$310	\$100	\$410	
<input type="checkbox"/>	MR Manufacturer's Representative Membership Any individual, sole proprietor, partnership or corporation actively engaged in the representation of products listed under Manufacturer Membership may apply for Full Membership as a Manufacturer's Representative. If an organization qualifies under Manufacturer Membership, it is not qualified under this section.				
<input type="checkbox"/>	EM Energy Management Company Membership Any individual, sole proprietor, partnership or corporation engaged in energy management, including Energy Service Companies (ESCOs), Independent Power Producers (IPPs), Integrators, Aggregators, and other similar enterprises may apply for Full Membership as an Energy Management Company.	\$210	\$100	\$310	
ASSOCIATE MEMBERSHIP		Annual Dues	Initiation Fee	TOTAL DUE	
<input type="checkbox"/>	Associate Regular Membership (Select Appropriate Category Below)	\$210	\$100	\$310	
<input type="checkbox"/>	Associate Full Membership Any individual, sole proprietor, academic institution, student, partnership or corporation meeting the requirements of Associate Regular Membership may apply for Full Membership at their option to enjoy the privileges of Full Membership, including the rights to vote and to serve on EGSA's Board of Directors. Initiation fees and annual dues will be assessed at the existing non-manufacturer Full Member rates. (Select Appropriate Category Below)	\$310	\$100	\$410	
Associate Membership Categories - Select One					
PLEASE SELECT ASSOCIATE MEMBERSHIP CATEGORY	<input type="checkbox"/>	AA Trade Publication Membership Any trade publication dealing with the electrical generating systems industry or its suppliers may apply for Associate Membership—Trade Publications.			
	<input type="checkbox"/>	AB Trade Association Membership Any trade association made up of individual or company members sharing a common interest in the electrical generating systems industry may apply for Associate Membership.			
	<input type="checkbox"/>	AC Engineer Membership Any consulting or specifying engineer may apply for Associate Membership—Engineer. Membership may either be held in the employer's name or individual's name under this classification. Individuals whose employer qualify as a Full Member, as described in the Full Membership section, do not qualify for this category.			
	<input type="checkbox"/>	AD End-User Membership Any individual employee of a company who owns or operates electrical generating equipment and/or related switchgear or components, whose responsibility to his employer includes planning, design, installation, supervision, or service of such equipment may apply for Associate Membership—User. Membership may either be held in the employer's name or individual's name under this classification. Individuals whose employer qualify as a Full Member, as described in the Full Membership section, do not qualify for this category.			
	<input type="checkbox"/>	AE Service Membership Any individual, organization or academic institution that offers services such as research, testing or repair to the electrical generating systems industry may apply for Associate Membership—Services. Membership may either be held in the individual's name or the organization's name under this classification. Individual companies whose employer or parent organization qualifies as a Full Member, as described in the Full Membership section, do not qualify for this category.			
	<input type="checkbox"/>	AG Educational Institution Membership Any postsecondary vocational-technical school or college offering on-site power generation-related instruction may apply for Associate Membership—Education Institution.			
	<input type="checkbox"/>	AM Military Membership Any individual who is currently enlisted, or who has been discharged, or has retired from the US or Canadian Military may apply for membership within this category. Proof of military engagement is required by either current Military ID card or honorable discharge documents.	\$50	N/A	\$50
	<input type="checkbox"/>	AR Retiree Membership Any individual who retires from a member company may apply for Associate Membership—Retired. This classification does not apply to any individual who is employed more than 20 hours per week.	Complimentary		\$0
<input type="checkbox"/>	AF Student Membership Any individual currently enrolled at an academic institution may apply for Associate Membership—Student.	Complimentary		\$0	

1. Contact Information

Company _____
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 Zip/Postal Code _____ Country _____
 Phone _____ FAX _____
 Official Representative _____ Title _____
 Representative's E-Mail _____ Company's Web Address _____
 How did you hear about EGSA? Web site Powerline magazine Colleague POWER-GEN Other _____
 Why are you joining EGSA? Certification Program CEU Program Power Schools Buying Guide Listing Other _____

2. Member Classification

Please use the worksheet on page one of this application to determine your membership type.

Full Memberships

- Manufacturer (MF)
- Distributor/Dealer (DD)
- Contractor/Integrator (CI)
- Manufacturer's Representative (MR)
- Energy Management Company (EM)

Associate Memberships

- Regular Associate Membership →
- Full Associate Membership →

(Select Appropriate Category)

- Trade Publication (AA)
- Trade Association (AB)
- Engineer (AC)
- End User (AD)
- Service (AE)
- Educational Institution (AG)
- Military (AM)
- Retiree (AR)
- Student (AF)

3. Membership Dues

(Please fill in the appropriate TOTAL amount from the dues schedule on page one.)

Membership Dues	\$ _____
Membership Plaque (optional)**	\$ 49.95**
On-Site Power Generation: A Comprehensive Guide to On-Site Power (optional)**	\$ 140.00 **
Florida Residents: Add 6% Sales Tax to ** items	\$ _____
** Shipping and handling is included for Continental US Residents.	
Non-Continental US Residents should call EGSA	\$ _____
Headquarters for shipping charges for **items.	\$ _____
TOTAL	\$ _____

4. Payment Method

(Payable in US\$ drawn on U.S. bank, U.S. Money Order, or American Express)

Check # _____ Amount Due \$ _____
 Mastercard Visa American Express

Card # _____ Exp. Date _____
 Signature: _____
 Print Name: _____

5. Products/Services

Please describe the nature of your business (50 words or less, NOT ALL CAPS). If you are a Manufacturer's Representative or Distributor/Dealer, please indicate which manufacturers you represent and/or distribute for; if you are a student, please provide the name and location of your school, your major and your anticipated graduation date:

Do you buy AND sell equipment? Yes No Do you manufacture packaged equipment? Yes No

Available Codes:

- | | | | | |
|-----------------------------------|--|--|---|--------------------------------------|
| 01 ---Batteries/Battery Chargers | 07 ---Engine Starters/Starting Aids | 12 ---Governors | 18 ---Relays, Protective or Synchronizing | 22 ---Trailers, Generator Set |
| 02 ---Control/Annunciator Systems | 08 ---Filters, Lube Oil, Fuel or Air | 13 ---Heat Recovery Systems | 19 Silencers/Exhaust Systems/Noise Abatement | 23 ---Transformers |
| 29 ---Education | 28 ---Fuel Cells | 14 Instruments and controls, including meters, gauges, relays, contactors, or switches | 20 ---Solenoids | 24 ---Uninterruptible Power Supplies |
| 30 ---Emission Control Equipment | 03 Fuel Tanks and Fuel Storage Systems | 15 ---Load Banks | 21 ---Switchgear and Transfer Switches (Automatic or Manual), Bypass Isolation Switches, and/or Switchgear Panels | 25 ---Vibration Isolators |
| 04 ---Enclosures, Generator Set | 09 ---Generator Laminations | 16 ---Motor Generator Sets | | 26 ---Voltage Regulators |
| 05 ---Engines, Diesel or Gas | 10 ---Generator Sets | 17 ---Radiator/Heat Exchangers | | 27 ---Wiring Devices or Receptacles |
| 06 ---Engines, Gas Turbine | 11 ---Generators/Alternators | | | |

Enter codes here: (Limit 10 codes per category)

Products sold: _____
Products rented: _____
Products serviced: _____

6. Sponsor(s):

A "Sponsor" is an EGSA Member who interested you in filling out this application. It is not mandatory that you have a sponsor for the Board to act favorably on this application; however, if a Member recommended that you consider membership, we request that individual's name and company name for our records.

Sponsor Name _____ Company Name _____


7. Official Representative's Authorization

Signature _____ Date _____

NEW EGSA MEMBERS

MF=Manufacturer DD=Distributor/Dealer CI=Contractor/Integrator MR=Manufacturers Rep
 EM=Energy Management Co. AA=Trade Publication AB=Trade Association AC=Engineer
 AD=User AE=Service AG=Educational Institution AM=Military AR=Retiree AF=Student

Alternate E Source CI Landing, NJ Tanja Lewit, President Environmental monitoring, power monitoring and management, physical security, mission critical equipment protection.	MATE USA MF Deerfield Beach, FL Tammy Anstett, Sales Director MATE USA is the US branch of Marco Pumps, the world-leading pump manufacturer from Italy. Our pumps have been used in the industrial, automotive, powergen and marine markets for over 40 years. We produce brass gear, PTFE gear, impeller and vane pumps with compact footprints and a wide-range of flow rates and a variety of seals.	Rogers, James AM Longview, TX
ARCCO Company Services Inc. dba ARCCO Power Systems DD Baton Rouge, LA Tom Sanders, CFO We sell, service and rent generators. Generac Dealer.	Peterson CAT DD San Leandro, CA Ted Fleming, Technical Recruiter We are an authorized Caterpillar Dealer and represent Caterpillar. We are a full service dealership in Northern California, Oregon and Southern Washington.	Abbott, Austin AF Kingston, ON Canada
B3C Fuel Solutions, LLC DD Conway, SC Brian O'Neil, CBDO We are a fuel solutions company that handles today's modern biofuels.	Power Solutions International MF Wood Dale, IL Mark Annarumma, Regional Sales Manager Power Solutions International (PSI) is a leading cleantech manufacturer and supplier of industrial and on-road engine and power solutions. PSI provides integrated, turnkey power solutions to original equipment manufacturers in the industrial, construction, agricultural, and on-road markets and offers a complete line of fuel-flexible, low-emission engines ranging from .97 liters to 22 liters of displacement for Gen-Set OEMs.	Campbell, Clayton AF Windsor, ON Canada
Blue Earth Generator Inc. DD North Arlington, NJ Mike Barker, VP/Service Manager Full service company for all your generator and co-gen products. Providing a full electrical rewind shop, fuel tank cleaning, fuel polishing, remote monitoring, transfer switches, switchgear, UPS sales and service, Union shop member of I.U.O.E. Local 16C.	Sunbelt Rentals Pump & Power Services . . . AE Raleigh, NC Mike Rosbrook, National Account Manager Sunbelt Rentals Pump and Power Services, one of Sunbelt Rentals' fastest growing divisions, specializes in innovative rental solutions for fluid handling, temporary power, climate control, and compressed air needs. Designed to serve distinct customer segments requiring a high level of technical expertise, we boast a comprehensive and specialized equipment set, highlighted by a modern fleet.	Cangemi, Alexander AF Oakville, ON Canada
Diesel Exchange, Inc. AE Springfield, MO Steve Hendrick, President We are a diesel engine rebuilder.	Garcia, Rene AM Henrico, VA	Creps, Corey AF Lansing, MI
Diesel Generator Services, Inc. AE San Dimas, CA James Pantaleo, President We provide service and maintenance of power generation equipment.		Doyle, Colin AF Balderson, ON Canada
Energy Service Solutions LLC AE Shelby, MI Jamie Near, Manager Service and repair of electrical generating systems (20 kW - 2,000 kW).		Irwin, Liam AF Port Hope, ON Canada
		McConnell, Kyra AF Orillia, ON Canada
		McElrea, Brenden AF Pefferlaw, ON Canada
		McKnight, Richard AF Peterborough, ON Canada
		Melo, Antonio AF Thornhill, ON Canada
		Moon, Terry AF Peterborough, ON Canada
		Starling, William AF Lindsay, ON Canada
		Szewczyk, Dennis AF Lindsay, ON Canada
		Wilson, Justin AF Borden, ON Canada Student





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- OSHPD Approved Day Tanks
 - OSP-0187-10

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 - High Velocity Hurricane Zone (HVHZ)
 - Miami Dade NOA #09-1216.04
 - AHCA Compliant
- ISO Containerized Units
- Florida Building Code #PDM825

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GFS CORP

Another in Our Series of EGSA Member Company Profiles

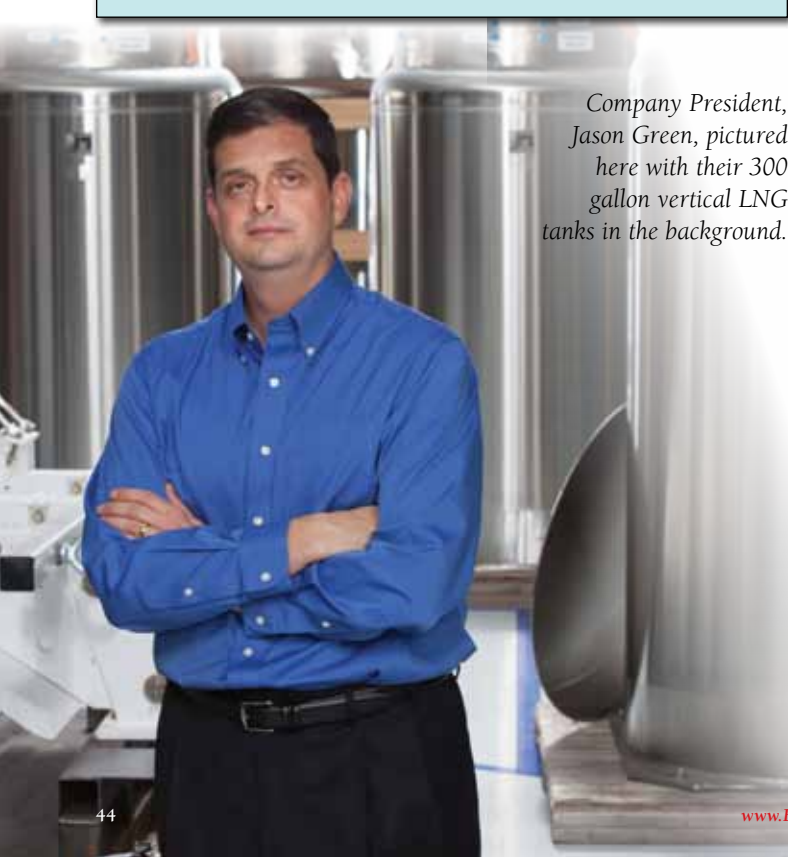
GFS Corp.'s corporate headquarters and manufacturing facility is located in Weston, FL.

GFS CORP

www.gfs-corp.com

GFS Corp is a Weston, FL headquartered company that designs, manufactures and sells proprietary solutions that enable high horsepower, heavy-duty diesel engines to operate on combination of natural gas and diesel fuel. The company's primary focus is providing fully integrated alternative fuel solutions for the mining & stationary power generation industries.

Company President, Jason Green, pictured here with their 300 gallon vertical LNG tanks in the background.



GFS Corp's core management team were some of the early pioneers in the bi-fuel industry, and are still active today, in senior management roles for the firm. Having developed some of the first systems that allowed stationary diesel generators to operate on a combination of natural gas and diesel fuel, GFS Corp. was founded in 2007, using that core team, with plans to focus on developing and bringing to market bi-fuel technology solutions for high horsepower, off road diesel engines, primarily those used in the mining, rail and construction industries.

Today the company offers its EVO-MT[®] Systems designed for large 100+ ton capacity mine haul trucks. It is a total truck solution, encompassing not only the engine conversion itself, but on-board liquid natural gas (LNG) storage, vaporization, regulation and distribution as well as numerous truck and operator safety systems.

Having successfully applied bi-fuel technology to these complex and dynamic applications in the demanding mining environment, GFS saw the opportunity to come full circle and to get involved in creating systems for the stationary power generation market. Over the years, high horsepower engine technologies have evolved and engine controls are now much more advanced and complex. GFS has taken the technology developed for the mining industry and applied it to a retrofit solution specifically designed for difficult dynamic load applications like those found in the power generation & oil and gas industry, unveiling the current EVO-SP system at POWERGEN 2012 in the EGSA Power Source Pavilion.

The EVO-SPT[™] System incorporates a graphical user interface, plug and play wiring harnesses that require no landing of individual wires in the field and greatly improved gas mixer technology, designed using computational fluid dynamics to en-

sure an even air gas mixture to all cylinders. Most importantly, the system offers Dynamic Setpoint Protection™, protecting the engine across its entire load range, not just at high load as other systems on the market are designed. Although originally targeted at the oil and gas sector, the product's advanced technology and sophisticated user interface are finding its way into many other stationary applications notably power generation for data centers and other critical back up power installations.

GFS Corp also offers an engine monitoring solution that can be purchased as an option with any of its EVO systems. This product monitors all critical engine parameters and displays them in real time on a specially designed application for the EVO connect on your i-Pad or via email on an excel spreadsheet. This product also offers unlimited historical data, logging all stored in the cloud.

The future looks bright for GFS Corp! The company is continuing to develop new and exciting systems for other High Horsepower markets. Their product offering, the EVO-SP™ System, is seeing

great success and being adopted by some of the largest data centers, hospitals, commercial buildings and oil and gas drilling producers globally.

The EGSA Connection

GFS Corp joined EGSA in 2010. The firm recognized that our membership has offered them a unique position for education, business development, camaraderie and GFS Corp has taken an active role in EGSA. One of our current EGSA Board of Directors Members (2012-2015), Lanny Slater, is a member of the GFS Corp. team. They also actively participate in the EGSA Power Pavilion as an exhibitor for POWER GEN Intl. and in recent years, during our NFMT Power Source Pavilion.

GFS Corp is an innovative company and is committed to continuing to develop and offer the most advanced and sophisticated, alternative fuel technologies to users of high horsepower diesel engines. For more information, please visit www.gfs-corp.com. ■



The GFS Corp EVO-SP™ 2600 System with its graphical user interface control panel.

A Caterpillar 793B converted using GFS Corp's EVO-MT® 7930 System. This one at Alpha Natural Resources' Belle Ayr mine.



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EGSA JOB BANK

EGSA Job Bank Guidelines

EGSA will advertise (free of charge) EGSA Member company job openings in the Job Bank. Free use of the Job Bank is strictly limited to companies advertising for positions available within their own firms. Companies who are not members of EGSA and third-party employment service firms who service our industry may utilize the Job Bank for a \$300 fee. Blind box ads using the EGSA Job Bank address are available upon request; company logos may be included for an additional fee. EGSA reserves the right to refuse any advertisement it deems inappropriate to the publication. To post an EGSA Job Bank ad (limited to approximately 50 words) please visit www.EGSA.org/Careers.aspx.

USA Central

Engine Rebuild Technician

Worldwide Power Products

Location: Houston, TX

Looking for a responsible, qualified and motivated technician with ability to diagnose, disassemble and assemble, overhaul, repair, and rebuild diesel and natural gas engines. Minimum Five (5) years of experience in diesel and natural gas engine rebuilds/overhauls. CAT or other OEM Certifications a major plus.

To apply: Send Resumes to Careers@wpowerproducts.com

Field Technician - South Texas

Worldwide Power Products

Location: South Texas, Eagle Ford

Install, commission, troubleshoot, repair, and maintain diesel and natural gas generators ranging from 20 kW up to 2000kW. Provides proper preventative maintenance service on equipment in the field. Maintain current customer base and bring new customer business; Prepare Quotations and Follow-up.

To apply: Send resumes to Careers@wpowerproducts.com

USA Mid-Atlantic

Rental & Service Sales Rep

Kelly Generator & Equipment, Inc., and Kelly Generator & Equipment of PA & WV, Inc.

Location: Western Pennsylvania

Service Sales Representative for Western PA Territory. Identify, pursue, grow and close new and existing client base for rental of mobile generator sets, load banks and service contract sales. Develop strong relationships with electrical and general contractors, home builders, event companies, industrial/commercial end users, rental houses. Benefits, base & commission

To apply: dkelly@kge.com, www.kge.com

Rental & Service Sales

Kelly Generator & Equipment, Inc., and Kelly Generator & Equipment of PA & WV, Inc.

Location: Northern Virginia

Rental & Service Sales Representative: Northern VA & Washington DC. Identify, pursue, grow and close new and existing client base for rental of mobile generator sets, load banks and service contract sales. Develop strong relationships with electrical and general contractors, home builders, event companies, industrial/commercial end users, rental houses. Benefits, base & commission.

To apply: dkelly@kge.com, www.kge.com

Industrial Sales

Kelly Generator & Equipment, Inc., and Kelly Generator & Equipment of PA & WV, Inc.

Location: Western Pennsylvania

Identify, pursue, & grow new/existing client base: Electrical, Design and Consulting Engineers, Electrical Contractors, General Contractors, Commercial/Industrial End Users. Work closely with Electrical Engineers in design phase and throughout the life of projects & of standby power solutions, specifications and purchase decisions. Sales include: New standby electric generators, automatic transfer switches, electrical switchgear.

To apply: dkelly@kge.com, www.kge.com

USA Midwest

Power Generator Mechanics

Central Power Systems and Services

Location: Liberty, MO

Must Have: Mechanical Diesel Engine and Electrical Knowledge; Customer Service Skills; Valid Driver's License; Tools. We provide a great benefit package including Employer Paid Medical and Life Insurance coverage options, 401(k), and Vacation Time. Our salary is highly competitive. Come join a team of professionals in a booming industry! EOE.

To apply: www.cpower.com

Doosan Portable Power - Rental & Sales Manager - Generators, Light Stands & Air Compressors

Central Power Systems and Services

Location: Liberty, MO

This position will involve travel within MO, KS, OK. This opening requires: Sales and rental management experience; Excellent communication skills (oral and written). Relocation packages on top of a strong base wage, incentive program and a full benefit package, Car Allowance, Fuel Card, Expense Card, etc. EOE.

To apply: www.cpower.com

Gaseous/Combined Heat and Power Generation Sales Representative

Central Power Systems and Services

Location: Liberty, MO

The Sales Representative is responsible to actively promote and market the sale of the MTU Onsite Energy brand. Travel Required. Excellent Communication Skills Necessary. Relocation packages on top of a strong base wage, incentive program and a full benefit package, Car Allowance, Fuel Card, Expense Card, etc. EOE.

To apply: www.cpower.com

Director of New Product Sales

Central Power Systems and Services

Location: Liberty, MO

Will represent globally recognized product brands consisting of MTU, Detroit Diesel and Allison Transmission to OE's and end users in the Industry: Oil and Gas, Power Generation and Construction sectors. We provide Employer Paid Medical and Life Insurance coverage options, 401(k), and Vacation Time. Highly Competitive Salary! EOE.

To apply: www.cpower.com

Corporate Controller

Central Power Systems and Services

Location: Liberty, MO

Requirements: CPA; 4-5 years of Public Accounting Experience; 1 or more years experience supervising 6 or more staff members; Experience with multi-site / multi-state entities, and have Microsoft Office and I.T. skills. We offer a strong base wage and a full benefit package. EOE.

To apply: www.cpower.com

Technical Support Engineer

ComAp

Location: Roscoe, IL

Seeking customer-focused team player to provide technical support to our customers and sales engineers. Front-line customer support that resolves technical issues for ComAp products. Test and analyze equipment failures to evaluate cause and determine corrective actions; Assist engineering department by providing expert technical support through presentations, training and daily support.

To apply: Visit our careers page at www.comapllc.com/careers or email confidential resume to genie.siwicki@comapllc.com

Application Deadline: 2015-04-10

USA Northeast

Field Service Technicians (Diesel & Gas)

Kinsley Power Systems

Location: East Granby, CT

Kinsley Power Systems, Location: CT, NY, MA, NH, VT, ME, NJ, PA, RI. Kinsley Power Systems is seeking experienced generator technicians throughout the Northeast. This position is responsible for completing preventive maintenance, repairs and service on standby power generation equipment. Due to the nature of the service business Field Service Technicians must reside within 25 miles of the available territory and have a clean driving record.

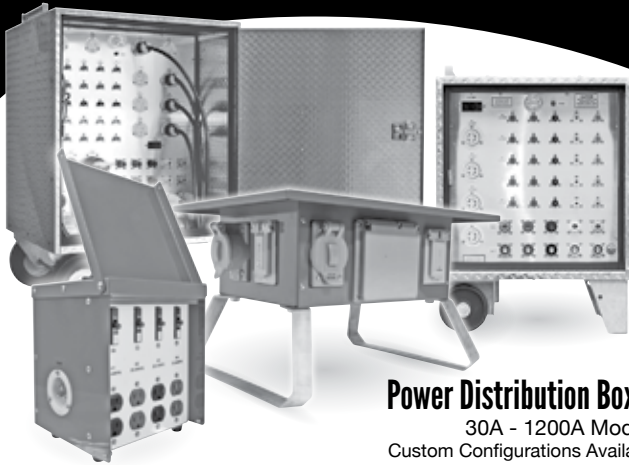
To apply: Lbarnes@kinsley-group.com

Manufacturer's Rep Seeking Principals

Leading Mid-South manufacturer's rep is seeking additional product lines. We have decades of experience in all aspects of the onsite power generation industry. We are interested in adding quality complementary manufacturers to our line of superior products serving the industry. Our record of outstanding success can help you achieve your sales and market share goals. Please respond if you have an area where you desire additional sales and market share.

Please respond to: J.Kellough@EGSA.org
(Reference PLMJ13JB-1)

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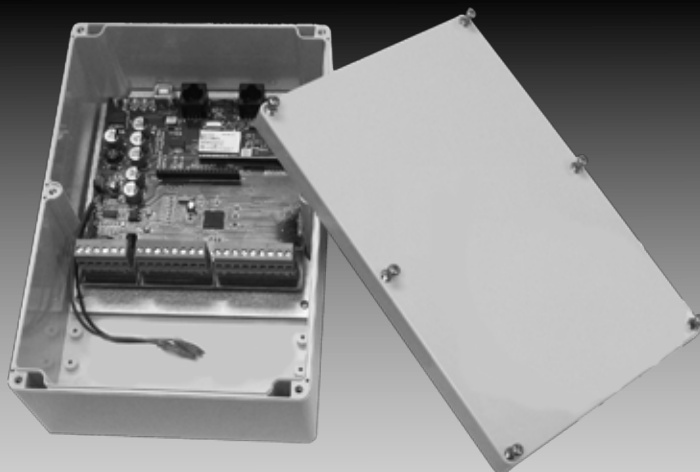
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EGSA JOB BANK

Aftermarket Sales - Northeast Territory

Kinsley Power Systems

Location: East Granby

Kinsley Power Systems is seeking an Aftermarket Sales Manager. The position is responsible for developing, growing and managing the Company's emergency power generator service sales business throughout a given geographic territory. He/she will serve as an ambassador to the Company's service department by selling service agreements, extended warranties and other service products to new customers while maintaining and expanding relationships with existing customers. The sales process includes, but is not limited to prospecting, cold calling, probing, qualifying, presentation & proposal generation and closing Accounts.

To apply: Lbarnes@kinsley-group.com

Operations Manager - Syracuse, NY

Kinsley Power Systems

Location: East Granby

Kinsley Power Systems is seeking an Operations Manager for our Syracuse, NY office. This role is responsible for providing overall leadership, coordination, planning, development, full P&L, budget, and administration of the operations/service function in one or more branch offices of the company, in order to meet the objectives of the company's overall business plans and strategies.

To apply: Lbarnes@kinsley-group.com

USA Southeast

Route Sales (314-773)

Tampa Armatures Works, Inc.

Location: Jacksonville, FL 32218

Route Sales will be tasked with establishing a route in order to effectively go after the small motor market share in the greater Jacksonville area, as well as the Southeast/west part of the state. Qualifications: High school diploma or GED; or 3+ years related experience and/or training; or equivalent combination.

To apply: http://tawinc-openhire.silkroad.com/epostings/submit.cfm?fuseaction=app.dspjob&jobid=314&company_id=16773&jobboardid=3353

Application Deadline: 2015-04-10

Manual Machinist (222-773)

Tampa Armatures Works, Inc.

Location: Jacksonville, FL 32210

Operate various machine tools to manufacture and repair mechanical assemblies. Record all data necessary to produce expected service and/or design results, including sizings and illustrations. Qualifications: Minimum of five (5) years experience as a Manual Machinist in machine shop & job shop work environment - (CNC experience is not applicable).

To apply: http://tawinc-openhire.silkroad.com/epostings/submit.cfm?fuseaction=app.dspjob&jobid=222&company_id=16773&jobboardid=3353

Application Deadline: 2015-04-10

C.E. Electrical Engineer (294-773)

Tampa Armatures Works, Inc.

Location: Riverview, FL 33578

Researches, develops, designs, and tests electrical components, equipment, and systems. Qualifications: Experience working in Industrial Panel design, medium, and high voltage switchgear. Thorough understanding and experience of electrical design, AutoCAD, and systems integration. A Bachelor's degree in Engineering preferred, but will consider past experience and knowledge. DFWP & EEO/AA: Females/Minorities/Disabled/Vets.

To apply: http://tawinc-openhire.silkroad.com/epostings/submit.cfm?fuseaction=app.dspjob&jobid=294&company_id=16773&jobboardid=3353

Application Deadline: 2015-04-10

Route Sales (315-773)

Tampa Armatures Works, Inc.

Location: Augusta, GA 30906

Route Sales will be tasked with establishing a route in order to effectively go after the small motor market share in the greater Jacksonville area, as well as the Southeast/west part of the state. Qualifications: HS diploma or GED; or three or more years experience and/or training; or equivalent combination.

To apply: http://tawinc-openhire.silkroad.com/epostings/submit.cfm?fuseaction=app.dspjob&jobid=315&company_id=16773&jobboardid=3353

Application Deadline: 2015-04-10

USA West

Sales Application Engineer and Customer Specialist

SENS (Stored Energy Systems)

Location: Longmont, CO

Responsible for reviewing customer RFQs and preparing technical and commercial proposals. Support and augment the overall sales organization. Provide direct customer contact and support concerning SENS product, technical inquiries and questions. Generate additional sales for battery chargers, DC Power systems and batteries through timely response and working with the sales organization.

To apply: Send cover letter and resume to johnk@sens-usa.com



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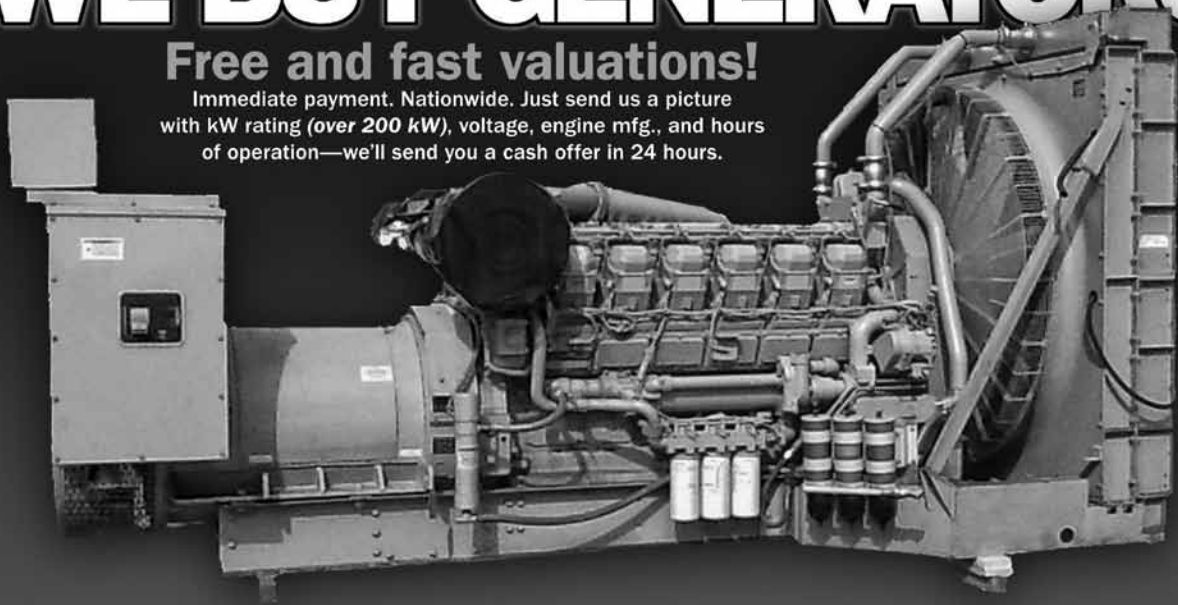
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Collicutt Energy Services Inc. Signs California Distribution Agreement With MTU Onsite Energy Corp.

Collicutt Energy Services Inc. signed an agreement with MTU Onsite Energy Corp. for power generator distribution and service throughout California. MTU Onsite Energy is a Rolls-Royce Power Systems brand, and provides diesel and gas-based power system solutions, from mission-critical to standby power to continuous power, heating and cooling. MTU Onsite Energy power systems are based on diesel engines with up to 3,400 kilowatts (kW) power output, gas engines up to 2,150 kW and gas turbines up to 50,000 kW.

MTU Onsite Energy is one of the top power system manufacturers in the world, due to its concentrated investment in research and development to create pioneering technology that is on the cutting edge of the evolving emissions policies and standards. Leveraging MTU Onsite Energy's leading technologies, Collicutt Energy will execute a measured and robust strategy for its sales and service team to be on the forefront of innovation and advancements in the industry. Through the distribution agreement with MTU Onsite Energy, Collicutt Energy broadens its geographical footprint in the state of California and streamlines product and service delivery for its customers.

"Collicutt Energy is committed to providing our customers with the best power generation technology and services throughout the U.S.," said Steven Collicutt, CEO of Collicutt Energy Services. "MTU Onsite Energy's distribution strategy and technologies underscore that commitment and align with Collicutt Energy's business growth plans."

Collicutt Energy is one of the largest power generator sales and services providers in the West. The distribution relation-

ship with MTU Onsite Energy will allow Collicutt Energy to better serve its customer base without the need for third party technologies or intermediaries related to engine selection. As a result, the business will be able to focus on sales and service delivery, while remaining price competitive in the marketplace. A seamless transition will ensure that Collicutt Energy customers will continue to work with the same team they have grown to know and trust, and will continue to receive exceptional services and offerings. All existing warranties in place prior to the transition will be upheld until their expiration.

For more information please visit www.collicutt.com. ■

Universal AET Receives Wisconsin Manufacturer of the Year Award Company Honored in Employee Development & Commitment Category

Universal Acoustic & Emission Technologies received the prestigious 2014 Wisconsin Manufacturer of the Year Special Award in the Employee Development & Commitment category at the program's sold-out awards ceremony at the Pfister Hotel in Milwaukee.

Universal AET provides standard and customized engineered acoustic, emissions and filtration solutions to the Power Generation, Oil & Gas, Industrial Processing, Data Center and Locomotive markets. Headquartered in Stoughton, WI, Universal is a global manufacturer with manufacturing facilities in Muscodia, WI; Beloit, WI; and San Luis Potosi, Mexico. It has additional offices located in Houston, India, Singapore and the United Kingdom.

Universal was selected for the award because of its strong growth and commitment to training employees for Wisconsin's

technology-forward workforce. It has added more than 50 jobs in the past year at a growth rate of more than 20 percent in Wisconsin. The company started Universal University, which provides training

in all areas of the company and demonstrates a corporate commitment toward employee growth in workforce development. Universal received a State of Wisconsin Department of Workforce Development's Fast Forward program in January to train supervisors at the company's facilities in Beloit, Muscodia and Stoughton. Together with Southwest Wisconsin Technical College, Universal AET created a customized Quality and Supervisory Management training program to educate more than 50 supervisors. Universal also implemented a growth program in which high-potential employees are identified and go through a mentoring program with upper management in conjunction with external leadership training. The goal is to develop and prepare future company leaders.

In addition to its employee training and mentoring program, Universal AET's manufacturing and distribution growth throughout the last decade has allowed the company to expand into new territory as it creates jobs. In 2013, Universal opened its Center of Excellence in the Beloit Ironworks business district. The center houses a dedicated team of engineers, designers, business staff and manufacturing specialists under one roof so all who work in the various stages of product development can better communicate. In 2014, Universal opened an office in Houston's Energy Corridor to better serve its customers in the Oil & Gas, Power Generation and Chemical Processing markets in Texas, Mexico, Central America and South America.

"We're extremely honored to be chosen for the Wisconsin Manufacturer of the Year distinction," said Universal President and Chief Operating Officer Dick Strojinc. "We're proud of our long history of serving a diverse customer base that has changed and grown with the evolution of our products, solutions and technologies, and we're committed to leading Wisconsin's charge as it becomes a model state for supporting the manufacturing industry."

Wisconsin Manufacturer of the Year award winners were selected by an independent panel of judges representing industry, education, and the public sector.

For more information please visit universalaet.com. ■

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