

POWERLINE

The Voice of the On-Site Power Generating Industry

2016 EGSA Spring Conference Recap

EGSA Receives a Jump Start as We Spur on the Next 50 Years in San Antonio

The Sales Landscape is Changing. Are You?

Today's Modern Diesel Fuel

Regular Fuel Monitoring Supports Generator Reliability

Benefits of UL Listed Factory-Built Positive Pressure Chimneys for Engine/Generator Exhaust

Gen-Tech, Inc. Member Profile



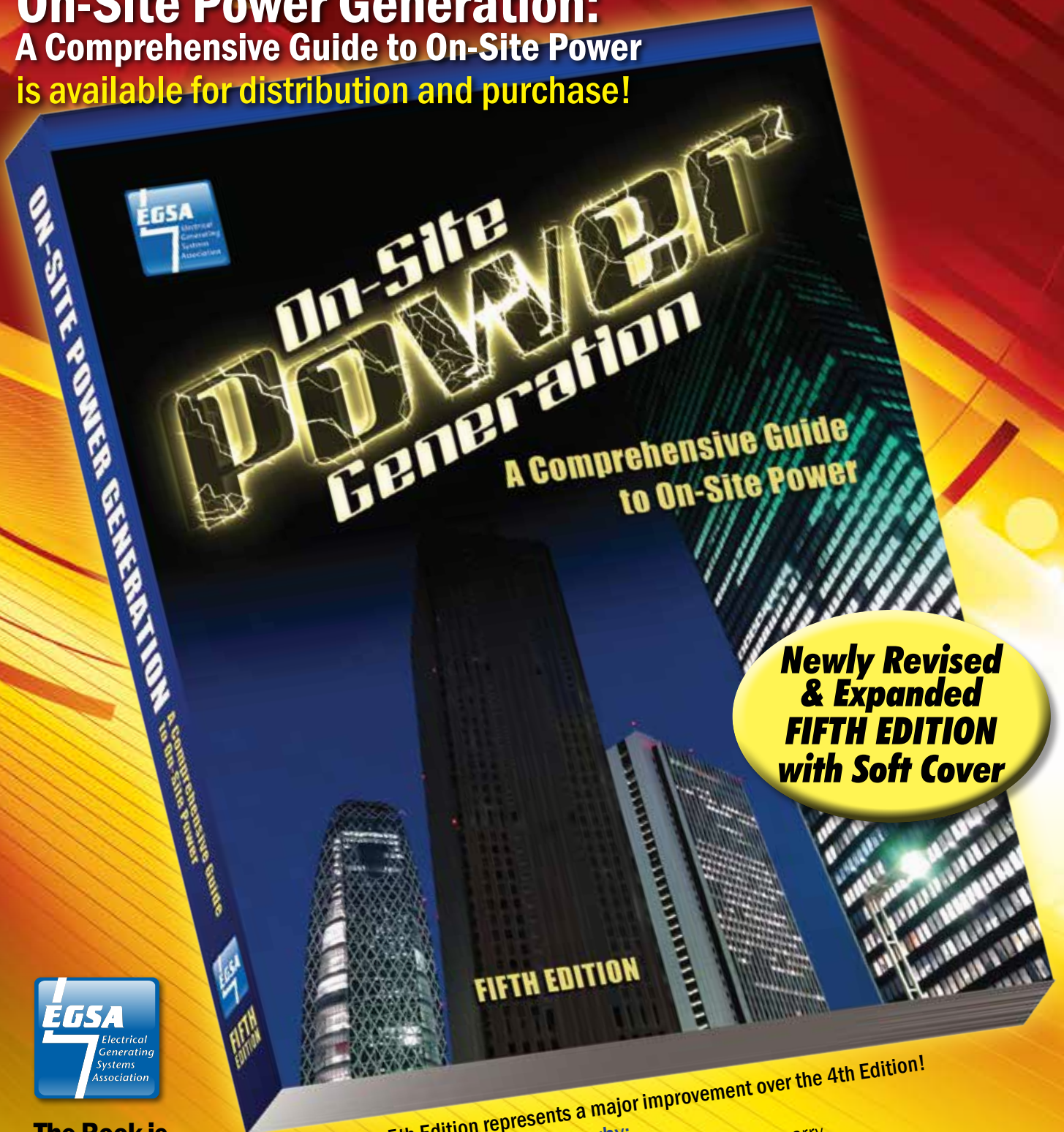
PSRST STANDARD
U.S. POSTAGE
PAID
FORT LAUDERDALE, FL
PERMIT #1956

The long-awaited 5th Edition of

On-Site Power Generation:

A Comprehensive Guide to On-Site Power

is available for distribution and purchase!



**Newly Revised
& Expanded
FIFTH EDITION
with Soft Cover**



**The Book is
in Stock!**

**Order Your
Copy Today!**

Published by the Electrical
Generating Systems Association

The 5th Edition represents a major improvement over the 4th Edition!
Here are a few reasons why:

- Soft cover vs. hard cover - lighter and easier to carry
- Over 700 pages vs. 600 pages (more than 100 pages added since the 4th Edition)
- 47 chapters vs. 39 chapters (10 new subjects!)

If you are in the business of On-Site Power, you should own a copy!
This is THE On-Site Power Generation book. It is all there. It's all in one place.
Call (561) 750-5575 or visit EGSA.org to download an order form.

Columns

From the Top 7
EGSA Needs Another 'Class of 2012' and Here's Why!

Education 8
Two Two's and a Single

Codes & Standards 10
Update

Features

EGSA Receives a Jump Start as We Spur on the Next 50 Years in San Antonio... 12
2016 EGSA Spring Conference Recap

The Sales Landscape is Changing. Are You? 21
Today's Modern Diesel Fuel 24
Regular Fuel Monitoring Supports Generator Reliability. 26
Benefits of UL Listed Factory-Built Positive Pressure Chimneys for Engine/Generator Exhaust. 30
Gen-Tech, Inc. Member Profile 40
Another in our series of EGSA Member company profiles.

Departments

Events Calendar 5
Association and Industry events.

Index of Advertisers 6
Who's Who in this issue of *Powerline*.

Association News 32
Updates from EGSA.

EGSA Membership Application 37
It pays to be a Member of EGSA. Join now!

EGSA New Members 39
Who has joined EGSA in the past few months?

Job Bank 42
Looking for a new job?

Industry News 43
The latest reports.



On the Cover: 2016 EGSA Spring Conference Recap; Page 12.



Benefits of UL Listed Factory-Built Positive Pressure Chimneys for Engine/Generator Exhaust; Page 30.



YOUR POWER. OUR PACKAGING.

YOUR IDEAS. OUR EXPERTISE.

LET US CREATE AN INNOVATIVE, ENVIRONMENTALLY-FRIENDLY SOLUTION TO MEET YOUR POWER GENERATION NEEDS. **THAT'S CUSTOM ENGINEERING.**

Integrated Solutions

Customers trust us to deliver fully-integrated solutions for their power generation projects.

Enclosures

Our UL 2200 listed enclosures are **built to withstand the effects of severe environments.**

Acoustics

We offer **solutions to reduce environmental sound impact** and meet stringent acoustic requirements.



A  FIBRE BOND® COMPANY

EVENTS CALENDAR

Conferences

EGSA 2016 Fall Conference

September 11-13, 2016; Sacramento, CA

EGSA's Annual Fall Conference features educational sessions on a broad range of issues impacting the On-Site Power Industry. More information will be available at www.EGSA.org or by calling (561) 750-5575.

EGSA 2017 Spring Conference

March 19-21, 2017; Kissimmee (Orlando), FL

EGSA's Annual Spring Conference features educational sessions on a broad range of issues impacting the On-Site Power Industry. More information is available at www.EGSA.org or by calling (561) 750-5575.

EGSA 2016 George Rowley Schools of On-Site Power Generation

The most complete overview of an On-Site Power Generation System available. Gain valuable Continuing Education Units (CEUs) by applying today! For information, visit www.EGSA.org or call (561) 750-5575.

Basic Schools

February 9-11 Scottsdale, AZ
June 7-9 Charlotte, NC
August 16-18 Sterling, VA
December 12-14 Orlando, FL*

*To be held concurrently with POWER-GEN International 2016

Advanced Schools

April 4-7 Austin, TX
July 11-14 New Orleans, LA
October 17-20 Nashville (Brentwood), TN

Industry Trade Shows

POWER-GEN International 2016

December 13-15, 2016; Orlando, FL

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



QUALITY IS NOT OPTIONAL

Hennig Enclosure Systems is committed to quality in every process, from sales through engineering, manufacturing, and service.

We believe that our customers want a partner that...

- > **Is Attentive From "The Get Go"** - Our total commitment to customer service is unmatched in the industry. Our sales quotes are turned around at lightning speed with full attention to detail and at a price that can't be beat.
- > **Provides Innovation & Customization** - With our experienced degreed engineers, Hennig can design anything you need from basic enclosures and tanks to fully customized models with every imaginable option.
- > **Believes That Quality Is Not Just "A Given"** - Hennig is ISO 9001 certified, and our stringent quality standards must be met or exceeded for every process.
- > **Won't Leave "Em Hanging** - Our service and follow-up is unlike any other, with service centers strategically positioned throughout the United States and Mexico.

Give us a call today and experience why Hennig Enclosure Systems should be your number one partner for your power packaging needs.

1-888-HENNIG6 (1-888-436-6446)
www.hennigenclosuresystems.com

HENNIG
ENCLOSURE SYSTEMS



ADVERTISERS INDEX

ANNA, Inc.	20
ASCO Power Technologies	44
Basler	30 & 31
CRN Wireless	18
Columbia Southern University	33
Diesel Gas & Turbine Publications	36
EGSA.	2, 28, 29, 34 & 35
Generator Solutions, Inc.	19
Hennig	5
International Supply Co.	4
Phoenix Products	23
Power & Compression Sales	22
Power-Tronics	39
Pritchard Brown	22
Ring Power Corp.	20
Robinson Enclosures	22
Russelectric, Inc.	9
Sage Oil Vac	27
Sunbelt Transformer	20
Thomson Power Systems.	36
United Alloy, Inc.	11
VDO	33

Disclaimer

Powerline Magazine is wholly owned and operated by the Electrical Generating Systems Association (EGSA) and includes advertising, press releases, editorials, and other materials and information submitted by third parties and gathered by EGSA, its publisher, and its agents and from contributors. This information is passed along by EGSA for the interest of its members only. With regard to products, services and information mentioned, advertised, or printed, EGSA, its publisher, and its agents, do not investigate the merit, accuracy or value of the material or information, and make no representations, warranties or endorsements of any kind, and hereby disclaim any responsibility to parties using such products, services or information. Readers' activities are at their own risk.

With regard to editorials, letters to the editor, columns and any other opinions expressed herein, EGSA, its publisher and its agents, do not ratify, adopt, endorse or verify such opinions, and hereby state that any opinions, express or implied, are solely those of the speaker. No information is to be regarded as legal advice and reliance thereon and accuracy of statements is hereby disclaimed.

With regard to information contained herein generally, EGSA, its publisher and its agents, do not guarantee, represent or verify the accuracy of any information. EGSA, its publisher and its agents, endeavor to provide accurate information, but cannot guarantee the accuracy and hereby disclaim liability for any reliance on the information contained herein.

EGSA, its publisher and its agents, make no representations, warranties or endorsements of any kind of the information, opinions, and advertisements contained herein, do not assert the accuracy of any statements and all reliance thereon is hereby disclaimed.

2016 EGSA Officers

President

Bob Hafich, Emergency Systems Service Company
bob.hafich@emergencysystems-inc.com

President-Elect

Charlie Habic, Gillette Generators Inc.
crhabic@gillettegenerators.com

Vice President

David Brown, Collicutt Energy Services Inc.
david.brown@collicutt.com

Secretary-Treasurer

Todd Lathrop, Eaton
toddmlathrop@eaton.com

Immediate Past President

Ed Murphy, Power Search, Inc.
ed@powersearchinc.com

2016 EGSA DIRECTORS

Paul Feld, Penn Power Systems

Ole E. Haaland, ANNA, Inc.

Bill Kaewert, SENS (Stored Energy Systems LLC)

Dennis Pearson, Woodward

Bob Piske, Arizona Generator Technology

Steve Sappington, Caterpillar

David J. Stringer, DEIF, Inc.

Kurtiss E. Summers, Austin Generator Service

Tom Wein, Generac Power Systems, Inc.

EGSA STAFF

Jalane Kellough, Executive Director

Liz Bustamante, Manager of Membership & Technology

Peter A. Catalfu, Manager of Communications

Herb Daugherty, Manager of the Rowley School

Kim Giles, Marketing Manager

Michael Pope, Director of Education

Debby Amaral-Robinson, Accounting Manager

Carla Walker, Manager of Conferences & Meetings

Herbert V. Whittall, Technical Advisor

Kelly Wilson, Office Manager

SERVICE INFORMATION

For Subscriber orders, change of address, reprints, and back issues (when available), contact:

Editor, *Powerline* magazine

1650 S. Dixie Hwy, Suite 400 • Boca Raton, FL 33432

561/750-5575 • Fax 561/395-8557

e-mail@egsa.org • www.EGSA.org

Powerline is published six times per year on a bi-monthly basis. Articles and information submitted for publication should be forwarded to the attention of the Editor at the address above 30 days prior to publication. Technical articles and articles of general interest to the electrical generation industry are actively sought and encouraged. *Powerline* reserves the right to limit information appearing in its pages to that which, in its sole discretion, will reflect positively on EGSA and the industry which it serves.

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.

Electrical Generating Systems Association

1650 S. Dixie Hwy, Suite 400 • Boca Raton, FL 33432

561/750-5575 • Fax 561/395-8557

e-mail@egsa.org • www.EGSA.org





Bob Hafich
2016 EGSA President
bob.hafich@
emergencysystems-inc.com

EGSA Needs Another 'Class of 2012' and Here's Why!

If you were in San Antonio in March at the Meeting of the Members, you heard that EGSA is going to roll out a membership drive at our next conference in Sacramento. After I returned from our Spring Conference I began thinking about the last time that EGSA did this in 2012, and the impact that it made on our organization.

First, I was in a different position with EGSA. At that time I had just completed my first year on the Board of Directors. It was also in my last year as the Membership Committee Chair. Michael Pope was President and his leadership team of John Kelly, Jr., Deb Laurents, Vaughn Beasley and Ed Murphy was quite effective not only in their leadership qualities, but also in their strategic location selections for our meetings in 2012. Milwaukee and Austin were 'key' in attracting people who might not traditionally participate in our conferences.

We have also seen some changes since 2012. We have continued to guide EGSA through our Strategic Long Range Plans, goals and objectives, and we have implemented a marketing plan to help us achieve those goals. Because of this, we have consistently reached industry professionals with our EGSA product and service offerings. The number of people attending our conferences has steadily increased over these past 4 years setting record attendance. Most notably at the Executive Leadership Summit in 2013 (which was in Seattle, WA) and at our 50th Anniversary last year (Jacksonville, FL). We have also achieved our membership goals each year since then.

What made 2012 so important you might be asking?

Not only was 2012 a great year for attendance, leadership and great venues, we also gained 24 new EGSA Members from our Hafich Challenge that year! That's right, as the Chair of the Membership Committee I remember how exciting it was to be involved with a campaign that would drive our numbers and most importantly, give new life to our membership as a whole.

I am not bringing this up to simply recognize myself. During the membership drive at the Milwaukee Conference, I was placed on stage wearing a bathrobe and graphically enhanced to look like Rocky Balboa, with 286 of my closest colleagues watching while I announced our winner, Charlie Habic (Gillette Generators, Inc.). I am bringing this

up because when our current Membership Chair Walter Petty (Atlantic Power Solutions) rolls this new challenge out at our Fall Conference, I hope that everyone will feel the excitement once again and help EGSA gain the momentum we need to keep spiraling upward in our 51st year.

We are going to be doing some things over these next few months to make this a successful challenge, but here is what I can report on behalf of our Board of Directors and our Staff.

1. The Membership Committee will be rolling out a Membership Challenge that will be won based on the number of new EGSA Members that you sign up between the Fall Conference this year and the Spring Conference next year.
2. The details will be sent out via email and Powerline Magazine. They will also be placed on our website when the materials are ready.
3. The Board has approved a significant prize that will be announced in Sacramento. Sponsoring new members and fostering growth for EGSA is a "win-win" proposal for everyone in the Association.
4. New growth is healthy, and EGSA has big plans to promote that by providing you with the tools to share a conversation about EGSA with your peers! From presentation slides to recruiting videos, we want to make it easier for you to talk about our association in your conversations.

EGSA is not a hard sell in my opinion. I am a firm believer that this organization has enriched both my personal and professional life. It is not hard for me to come up with testimonials about our products and services, and it makes me proud to own a piece of that success.

Please participate when that challenge kicks off in September! EGSA Staff is busy surveying the 'Class of 2012' right now to see what made them join, become active, and most important stay active. Stay tuned for the next issue when we will closely examine the list of companies that joined in 2012, as well as the First Timers from both the Spring and Fall conferences that year. I believe that we can not only repeat that success, but increase upon it if we all work together.

Thank you in advance for your active participation on behalf of EGSA. ■



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

Two Two's and a Single NEWS – There are Now Two EGSA Grants for Military Veterans!

NEWS – There are Now Two EGSA Grants for Military Veterans!

Raymond G. Russell Education Grant for Veterans

This generous grant, in the memory of the founder of Russelectric, Inc., pays the transportation, accommodation and registration costs for veterans with generator set experience to attend one of our George Rowley Schools of On-Site Power Generation.

The Russell Grant has been helping veterans increase their knowledge of generator systems since 2014. Full details of this grant may be found on the EGSA website under Education & Certification. Applications for the 2016 Russell Grant must be submitted by July 1st.

New EGSA-Fairbanks Morse Grant for Veterans

Through the generosity of Fairbanks Morse Engine, we are delighted to announce the creation of a new annual grant for veterans of the US and Canadian militaries.

This grant will pay the cost of the EGSA Technician Certification test including the all-important study guide and the 5th edition of the On-Site Power Generation: A Comprehensive Guide to On-Site Power reference book. Either the Apprentice or Journeyman test may be taken.

All ex-military veterans with generator set experience and an honorable discharge are eligible to apply. Clearly, EGSA Technician Certification is the non-brand specific benchmark of a technician's knowledge of all aspects of generator systems. EGSA member companies looking to hire technicians prefer certified technicians as this is a great guide to the technician's level of knowledge. EGSA Certification will be invaluable to veterans as they transition to civilian employment.

Applications may be submitted at any time; successful applicants will be notified during each December and the study guide and reference book will be sent to them within 4 weeks. The Certification test must be taken within 12 months.

The EGSA Technician Certification tests the technician's knowledge; it does not provide for any instruction or training. Veterans may win a Russelectric Grant and attend a Rowley School

to increase their generator set knowledge, then apply for a Fairbanks Morse Grant to test that knowledge and become EGSA Certified.

Full details of this new grant may also be found on the EGSA website under Education & Certification.

We are most grateful to Fairbanks Morse Engine and Russelectric for their generosity and their desire to help our veterans advance in their civilian power generation careers.

NEWS – There are Now Two NEW EGSA Educational Programs!

A Partnership Between EGSA and Columbia Southern University (CSU)

Are you planning on furthering your education and career? Perhaps towards a degree in business administration?

EGSA has just entered into a partnership with Columbia Southern University (CSU). This partnership makes CSU's extensive list of online degree programs available to EGSA members at a 10% discount. You may choose from associate, bachelor, master or certificate programs. Since this is an online program, you set the learning times to best suit your schedule.

Many business professionals have increased their knowledge, qualifications and career opportunities through online college and university courses; one individual that has taken this path is Steve Sappington, EGSA Board Member (Caterpillar, Inc.), who writes:

"Besides providing affordable tuition that'll be further discounted for EGSA member employees, free, new textbooks, including shipping, modern tools to facilitate completing course work on the learner's schedule, and lifelong access to CSU's electronic library that provides access to a plethora of publications, CSU's professors are recognized subject matter experts and practicing professionals. Students receive a current, practical, extremely valuable education. As a CSU alumni and advisory board member I can attest to the high levels of course quality and friendly, helpful student assistance provided by CSU."

Check out columbiasouthern.edu and see their ad on page 33.

Continued on page 18

All the capabilities you want... and some you may not have considered!



Custom Designed and Built Power Control Systems

With mission-critical data and life safety at stake, why would you try to make do with a standard catalog power control system? Why would you settle for a less than optimal solution?

Don't compromise. Insist on a powerful, flexible, fully-integrated Russelectric Power Control System... custom-designed and built with your specific needs and wants in mind. Russelectric will custom tailor a power control system that not only provides all the operating, monitoring, and reporting capabilities you want, but one that is intuitive and easy to use because it is based on your way of doing things. And because Russelectric specializes in custom systems, we can often suggest features and capabilities you never even considered.

1-800-225-5250  russelectric.com
An Employee-Owned Company / An Equal Opportunity Employer

Russelectric
POWER CONTROL PEOPLE YOU CAN RELY ON



Herb Whittall
EGSA Technical Advisor
HWhittall@comcast.net

Codes & Standards Update

The EGSA Conference in San Antonio was awesome. Tucker Carlson's keynote was worth the whole conference. He was knowledgeable and very amusing about the upcoming national party conventions.

The Codes and Standards Surveillance Committee had a solid attendance. John Svendsen (Woodward) ran a good meeting and while there was no speaker, the committee had plenty to discuss from the UL 2200 working group about IEEE 1547.

There were 4 items that were brought to the EGSA Board following the Conference.

They were:

1. Can EGSA request minor changes to UL 2200 concerning Enclosures and Gas Valves and should we become members of the committees of NFPA 20 "Installation of Stationary Pumps for Fire Protection" and NFPA 37 "Installation and Use of Stationary Combustion Engines and Gas Turbines". **These were all approved.**

2. Due to Herb Daugherty's workload with the EGSA Schools and IEEE 1547, EGSA was seeking alternates from our membership to help me with the NFPA Committees.

Keith Page (Selkirk Corp. – Pressure Stacks) volunteered to be one of the EGSA Members for NFPA 37 along with me. Special thanks to Keith for getting involved. EGSA Staff also advised me that Keith will have an article of his own in this issue of *Powerline* (page 30). Make sure you take a look at it as you are reading through this issue. We also had James Hunt (HOTSTART) step up as my alternate on NFPA 110 "Emergency and Standby Power Systems" and NFPA 111 "Stored Electrical Energy Emergency and Standby Power Systems."

Opportunities for engagement:

- A. We did not have any of our members volunteer to be a member of NFPA 20.
- B. No one has come forward to be a member of NFPA 99 "Health Care facilities Code". If you are interested and your company approves, please contact me directly or contact Jalane Kellough, Executive Director.

3. Steve Sappington (Caterpillar, Inc.) has been chairing a work group working with UL to make some changes to UL 2200. The biggest hurdle for the group is on how Enclosures are covered. The EGSA working group agreed with the following wording to be added to UL 2200 concerning Enclosures to define "Skin tight" and "Drop over" enclosures.

UL 2200 Paragraph 72.1 "An enclosure defined under this Standard is typically referred to as 'skin-tight' or 'walk-in' enclosure. A 'skin-tight' enclosure is where required clearances are provided through the exterior to the enclosure with maintenance access to parts of the generator from the outside of the enclosure. A 'walk-in' enclosure is where all the required clearances are provided within the enclosure, similar to when a generator is installed in a service room."

I will be submitting these changes to UL on behalf of EGSA.

Steve Oxtoby (Kohler Power Systems) will chair a Task Group to work with UL on getting the necessary changes made to UL 2200. Both Steves (Sappington and Oxtoby) are members of NFPA 37 and will be working with NFPA 37 and UL 2200 to try and harmonize the two standards. One change they have requested is that UL 2200 paragraphs 41.3.2.2.2 (a) and 41.3.2.2.2.3 (a)(2) have the quantity of 1 second changed to 2 seconds.

4. IEEE 1547 is being rewritten and we have Marcelo Algrain (Caterpillar, Inc.) and Herb Daugherty (EGSA) amongst others, working on this rewrite. However, the committees are stacked with representatives from Utilities and Inverter companies, so we need more attendees from EGSA to help balance the input. Please contact Herb or Marcelo for more information, if you have an interest in assisting with these important tasks.

After the EGSA Conference, I went north to Austin to attend the 2016 Energy Thought Summit (ETS 16 Convention). While the event mostly concerned Utilities and their future, there were several discussions on Distributed Generation, which many felt was the future of the Utility industry (along with wind, solar and thermal energy production). In fact, one panel member said "By 2030, there will be no more internal combustion engines generating elec-

Continued on page 20

A SINGLE STRATEGIC SOURCE FOR

TANKS FRAMES SKIDS TRAILERS



Why do Fortune 500 OEM industry leaders look to United Alloy, Inc. (UAI) for certified metal fuel and hydraulic tanks, skids, frames, trailers, chassis and other products crafted to world-class standards?

We design, manufacture, powder coat, assemble, test, and deliver the highest quality products, on-time, every time.

Call us to experience the service, quality and savings firsthand.

Learn more at www.unitedalloy.com



UNITED ALLOY, INC.

engineered smart. built strong.

4100 Kennedy Road, Janesville, WI 53545
(608) 758-4717 • Fax: (608) 758-1272 • www.unitedalloy.com





2016 EGSA President,
Bob Hafich (Emergency
Systems Service Co.).



2016 EGSA Vice-President
and Conference Emcee,
Charlie Habic (Gillette
Generators, Inc.).

EGSA Receives a Jump Start As We Spur on the Next 50 Years in San Antonio



We recognize that you can't jump start the kind of horse that requires a spur, but in the process of kicking off our 51st year as a global trade association, all bets were off when we reached San Antonio!

Our current attendance record was attained in 2013, with our Executive Leadership Summit in Seattle, where EGSA garnered an attendance record of 359. Then, in Jacksonville last year, we reached 352. So, while we didn't break any records with our total of 327 attendees, we definitely made our mark while in Texas.

EGSA hosted an outstanding slate of speakers to go along with our active membership! According to attendee surveys, our keynote speaker Tucker Carlson really hit home with a resounding amount of positive feedback. Thank you for letting us know how impactful this keynote speaker was to you! It pushes our Conference Planning Committee to work harder.

Tucker is the anchor of Fox and Friends Weekend and also the Editor-in-Chief of the Daily Caller. He was the consummate professional, speaking to both sides of the aisle with election information the audience found useful. Tucker walked a fine line with an intense topic. His message was timely and relevant for discussions in all circles (both professional and non professional), so it was good to get a savvy opinion, mixed with a measure of patriotism and humor.

"Tucker Carlson's presentation on today's political landscape was very insightful. It was also entertaining... much like the 2016 election year," adds Charlie Habic, Conference Planning Committee Chair. "Looking ahead to the Fall Conference, members can look forward to us staying the course with the political theme."

Several EGSA Members stepped up to present in San Antonio, both seasoned veterans and a couple of "First Timers," Gary Farmer (Curtis Engine and Equipment) presented a meaty case study on a project that his firm recently completed that receives a portion of its power by a central utility plant, including a Combined Heat and Power (CHP) plant. Gary's been attending EGSA events for many years. He has more than 30 years in electrical power generation and has designed and manufactured generator sets and switchgear for both domestic and foreign markets.

Michael Sanford (Cummins Power Generation) may have been new to an EGSA conference, but he took to the task, providing an excellent presentation on the 2016 EPA Emissions Update for Generator sets. Michael leads a team of technical experts who support the technical sales department and drive industry-leading innovations in power system application and design. We hope to see more of Michael now that he has made his mark by presenting during his first EGSA conference!



Another great member presentation occurred on Tuesday, with Hal Walls (Clariant Corp.) facilitating a panel discussion on alternative energy solutions, threat vs. opportunity. Along with Steve Evans (ASCO Power Technologies), Bill Kaewert (SENS Stored Energy Systems, LLC) and two additional "First Timers," John Palermo (Challenger Electric) and Mike Bergey (Bergey Windpower Co.), this panel scratched the surface on what wind, solar, battery and microgrid energy mean to the future of our industry and our grid.

Our EGSA Committees also hit the trail at a fast pace. The Education Committee is looking into an LMS system, which will ultimately enable EGSA to offer some online educational courses. A sub-committee, within the Education Committee has made good progress in developing an EGSA Certified Load Bank Technician program. This program will be comprised of classroom and hands-on training, in addition to the final exam. EGSA Board Member Paul Feld (Penn Power Systems) is chairing this sub-committee and it is expected that the program will be ready

to launch during 2017.

The EGSA Distributor Dealer Committee unveiled a plan to develop the EGSA Technician Apprenticeship Program, or TAP, with Chad Youkers (Sunbelt Transformer Ltd.) leading the Working Group exploring this opportunity for EGSA.

Another great new program announced during the conference was regarding a new member offering. During the past few years, our EGSA Rowley School instructors have benefitted greatly from a series of webinars on Adult Learning Techniques offered by our professional consultant Bill Heacock. EGSA is now offering this webinar program to all members. This is our first training course that does not require travel! Anyone in your company who makes technical presentations will be able to improve their delivery by participating in this webinar. See the EGSA website for sign up details and classes hosted in June and July.

In addition to our speaker slate and committee work, we also had time to work in some truly memorable moments! For anyone who came to San Antonio, it was hard not to get choked up as James Wright accepted the Gordon Johnson lifetime achievement award on Monday night during our Awards Banquet.

Established in 1994, the award is given on an "as-needed basis" to honor an individual who has devoted their career to the betterment of the Association and the Industry. This "Member Emeritus" award is only given to those individuals who have retired from on-site power and who the Association feels deserve the title "Member for Life."

Jim is something of a legend in this industry: he has been a member since 1973, was one of the founders of our Rowley Schools of On-Site Power Generation and the famous EGSA Reference Book. When you speak of dedication, with more than



20 years of teaching at these schools, he only missed one class! Jim was the EGSA President in 1990 and was recently featured in an EGSA Time Capsule (March/April -2015 issue).

What Jim Wright Had to Say About This Honor...

"To say that I was surprised and overwhelmed to receive an award named after Gordon Johnson, who was my mentor and friend, is an understatement. And then to be included with a group of truly outstanding people such as Art Coren, Tom Richards, my buddies Ike Davidson, Herb Daugherty and so many others is a great honor. This is without doubt the highlight of my career.

To quote Forrest Gump - This all I have to say about that." James Wright, April 6, 2016.

We also honored Ed Murphy with his outgoing Presidential plaque and Dennis Pearson of Woodward was awarded our prestigious 2016 William Timmler Award for his tireless work on behalf of the EGSA Education Committee from 2009 until 2011.

If you missed the action in March, we have captured our member presentations for the EGSA YouTube Channel™, so you can access several of our videos from the Spring Conference. Make sure that you are subscribed to the EGSA YouTube Channel, so that you can have access to the great videos we have stored for you! Also, feel free to share EGSA's YouTube Channel with your colleagues who were able to attend.



Top Left: Michael Sanford (Cummins Power Generation) gave a timely presentation on EPA Emissions for Generator Sets – the 2016 Update.

Top Center: Gary Famer (Curtis Engine and Equipment) provided a case study on the use of CHP at the Horseshoe Casino, one of Baltimore's leading entertainment attractions completed in 2014.

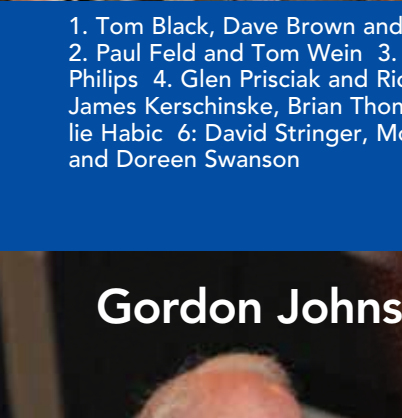
Top Right: Astronaut, Mike Mullane jump started the Tuesday General Session with a presentation on safety that used the Space Shuttle Challenger disaster to define the term normalized deviance and its safety consequences.

Row 2 Left: Hall Walls (Clariant Corp.) moderated Tuesday's Alternative Energy Panel Discussion. Panelists included Mike Bergey (Bergey Windpower Co.), Steve Evans (ASCO Power Technologies), Bill Kaewert (SENS - Stored Energy Systems), and John Palermo (Challenger Electric of So. CO., Inc.)

Row 2 Right: On Tuesday, Ingrid Gudenias gave a presentation on how to effectively provide a better presentation. She used her skills to transform one of our members' skillsets onstage.

Bottom: Cory Fones (ComRent International) presents Paul Bazzetta with a Bose Wireless speaker for being present to win when his name was called during the Tuesday General Session. Thank you ComRent and congrats Paul!





1. Tom Black, Dave Brown and Kevin McKinney
 2. Paul Feld and Tom Wein 3. Joni and Dave Philips
 4. Glen Prisciak and Richard Knittel 5. James Kerschinske, Brian Thompson and Charlie Habic
 6: David Stringer, Morten Pedersen and Doreen Swanson

Join us for the 2016 EGSA Fall Conference

Gordon Johnson Lifetime Achievement Award Winner, Jim Wright



In 1994, EGSA established an award in honor of our first Technical Advisor, Gordon Johnson. Gordon was employed by Kohler Co. as a Senior Staff Engineer in its Generator Division and was highly active in EGSA for well over 2 decades, so it is only appropriate that we name our lifetime achievement award after him.

The award was established to honor individuals who have retired from the industry

and whom the Association feels deserve the title "Member for Life." Jim Wright is such a person and our Spring Conference supplied our members that were present with a special EGSA moment when Bob Hafich called Jim to the stage that evening.

Even the next day (Tuesday) during the General Session, Charlie Habic (Gillette Generators, Inc.), our emcee, remarked publicly that we had all been privy to a very special EGSA moment....and, not only had Jim won the Bose wireless speaker thanks to Reverso Pumps on Monday during our drawing, but he had also taken home the "Member Emeritus" title!

Speaking of titles, Jim is only the 24th person in 51 years to be recognized for such an award and he is in fine company. He was also our EGSA President in 1990. He received his BS in Nautical Science, and a commission as Ensign in the US Navel Reserves from the US Merchant Marine Academy, Kings Point, NY. He served his country for 9 years until he came ashore and met his lady (his words).

After his service, Jim went to work for Lima Electric where he began in inside sales for gensets. Jim was an active member of EGSA beginning in 1973 and remained active until his retirement from the industry in 2012. EGSA is extremely lucky that even in retirement; Jim and his wealth of knowledge have remained available to our Members, Staff and Board. He has worked tirelessly on the brand since the moment he became engaged in the work of EGSA. He was an EGSA Instructor on Basic Electricity and Generators for 25 years, helped establish the first EGSA reference book and was so involved, we even named the Education Award after him!

Jim is not shy. Even in his extended youth, he has reached out to current and new members to make them feel welcome or to make sure that they were getting involved and becoming active. "Jim always has a smile on his face and a great story to tell! I am so happy for him," shared Jil Holmstrom (Fairbanks Morse). Our members both young and old think he is an ideal, when it comes to active membership in EGSA.



President Bob Hafich honors Past President, Ed Murphy (Power Search, Inc.) with his outgoing President's portrait and jacket. Ed did something different, in that he chose to commemorate the year with a photo of him with EGSA staff.



President Bob Hafich honors Dennis Pearson of Woodward with our prestigious 2016 William Timmler Award for his tireless work on behalf of the EGSA Education Committee from 2009 until 2011.



Jim Wright accepts the Gordon Johnson Lifetime Achievement Award on Monday night.



September 11-13 in Sacramento, CA

Join EGSA in the "Golden State of Power" during our 51st Annual Fall Conference in Sacramento, CA. Details will be made available during the first week of July. We hope you can make it!

Here's what a few of his fellow members shared about our colleague and mentor, James Wright:



I've known Jim Wright for almost as long as I've been a member of EGSA (1973). He has been a tireless member of EGSA, especially with the Education Committee. They don't come any more unselfish in offering time and knowledge than Jim when it comes to supporting the EGSA organization and our members.

I have made many of dear friends from my membership in EGSA and I consider it my privilege, and Jim Wright as one of the best!"

Warner Bauer, 2008 EGSA President



"When you talk about a legacy, Jim Wright definitely comes to mind. I was inspired to present Jim with his Lifetime Achievement status this year. He is truly a professional in the field of On-site Power Generation!"

Bob Hafich, 2016 EGSA President



"Whenever there was a generator set electrical problem that I didn't understand properly, Jim was always the go-to person, the expert and the coach, and we could be sure that he would gladly share his immense knowledge and have the answers. Over the years I have talked with many people who also came to rely on Jim for help with understanding electrical issues and all benefitted from his advice in the same way.

This is a man with great integrity, knowledge, generosity with his time and a deep desire to help others in our industry. And he was, of course,

a huge asset to his employer.

His contributions to the On-Site Power Generation industry and this Association make him so very deserving of the Gordon Johnson Lifetime Achievement Award."

Michael Pope, 2012 EGSA President

- J**okester Jim always has something funny to share while talking over an adult beverage.
- I**nspiring Staying engaged in the organization for all these years Jim has been an inspiration to many of us in the industry.
- M**entor It would be hard to count the number of people Jim has mentored, but I know one for sure.
- W**itty Never try to outwit him. You will lose.
- R**elevant Who does not want to be relevant? Jim has been relevant for a lifetime.
- I**ntelligent Don't know that I have met too many smarter people in my career.
- G**enuine You can always count on Jim to be Jim, regardless of circumstances.
- H**onor It has been a true honor to know Jim the past 30 plus years.
- T**hank You Thank you Jim for all you have done for me, EGSA, and the industry.

You are certainly deserving of the lifetime achievement award. Congratulations.

Vaughn Beasley, 2014 EGSA President



Continued from page 8

Are Your Presentations Perfect?

Do you make presentations? How about others in your organization? Are they perfect? Could they be made any better?

We think that the answer is ... probably. And it doesn't make any difference whether the presentation is technical training or being made to customers, employees or a board of directors. You have information you want to share and you hope your audience is receptive, attentive and will recollect what you said for some time after you have finished.

EGSA can help with the first EGSA online educational webinars for members. Here are the details of the first two:

Webinar Title: Adult Learning & Presentation Strategies

When: Wednesday, June 1st, repeated on Tuesday, July 26th, 2016

Times: 11:00 – 12:30 pm Eastern (both dates)

Registration: Online at EGSA.org. Registrants will be notified of the connection requirements by email, prior to the webinar.

Option: Professional analysis of the participant's presentation. Send in a 20 minute video and you will receive an analysis of the speaker's visual aids and presentation skills, with recommendations on how to make it more effective.

Anyone in your company that makes presentations can benefit from this program, including top management, sales people, engineers and technical trainers.

Our consultant for presentation strategies, Bill Heacock, specializes in technical training techniques and he is very good; his webinars for our Rowley School instructors have been instrumental in improving our presentations and the attention and retention levels.

As highlighted in an earlier Education column, here is what some of our Rowley School instructors have said about Mr. Heacock's webinars:

"Bill Heacock's training kept my attention and helped me learn how to keep the attention of those that I train. I feel that Bill's training was extremely useful and not only did I change my presentations for the EGSA Rowley Schools but also changed how I put together my presentations for my current employer!"

Todd Lathrop, Eaton Corporation.
(Instructor for Transfer Switches)

Wireless Generator Monitoring



CRN
wireless

Wireless
Communication Device

www.crnwireless.com

Nationwide – GSM or CDMA cellular

Real-time – Alerts by email or SMS text message

Simple – Mounts directly to generator and NO programming

– **Universal** –

Any make, model or year generator

www.crnwireless.com
(631) 696-2769



Over 25 Years of Wireless Expertise

Monitor:

- Run / Stop
- Fail to Exercise
- Two Auxiliary Inputs
- Two Virtual Hour Meters



< Back (1133) Memorial Contact

Today 9:53 am

Memorial Hospital
Generator Alert:
Generator Has Run
53.50 Hours
Since Last
Maintenance

EDUCATION

“I did a series of web activities with Bill and EGSA some years ago. It was a very helpful exercise. I really liked Bill’s feedback on the taped session - it changed the way I do presentations and PowerPoint. It can be difficult to get feedback that is not subject matter based, but Bill did an excellent job of critiquing instructors on their presentations. His suggestions really help me reach my audience, and I believe retention has improved because of it.”

Walter Chrysam, Alban Cat.

(Instructor for Basic Electricity, Generators/Alternators)

“The webinar was very insightful and was packed with valuable information, not only on common missteps that I was already committing, but also ways to enhance the presentation for more effective learning.”

Jim McDonald, PowerSecure, Inc.

(Instructor for Engine Exhaust Emissions)

I started making presentations when I was in my 20s and I have had a LOT of birthdays since those days! During the years I have made hundreds of presentations. End users, distributor meetings, OEMS, lunch ‘n’ learns, in-house employee meetings and almost 10 years instructing at the Rowley Schools. I found

Bill Heacock’s insight into adult learning strategies to be really useful, as has every other instructor that has participated in Bill’s webinars. We have all modified our presentations for improvement as a result, both the delivery and the presentation layout. I have no hesitation in recommending this webinar to anyone that makes presentations – you will make them more effective!

Space is limited so be sure to register early. We will add additional webinars as needed.

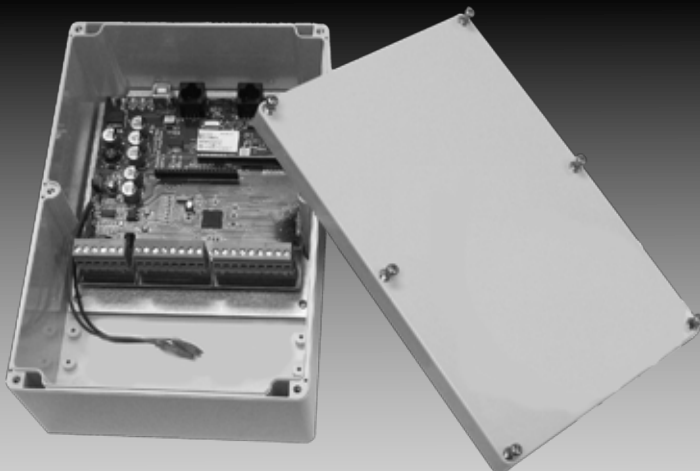
Certified Technician Test – Apprentice Level

The passing score for the Apprentice test has changed. Apprentices now have to achieve a minimum of 68 correct answers out of the 100 questions to become certified. Raising the passing score benefits the technician as it validates their knowledge base, and it benefits a potential employer since they will have an impartial confirmation of how much the technician knows. The new passing score went into effect on March 1st.

Comments or questions? Send me an email: m.pope@egsa.org. ■

GENTRACKER™ Generator Monitoring System

By Generator Solutions, Inc.



The only
TRULY UNIVERSAL
Generator Monitoring System

- **ANY BRAND**
- **ANY SIZE**
- **ANY TYPE**
- **ANY AGE**

- Easy to install
- No programming required
- Automatic Monthly Activity Emailed

- Notifications by e-mail and cellular text messaging
- Internet-based
- Remote starts

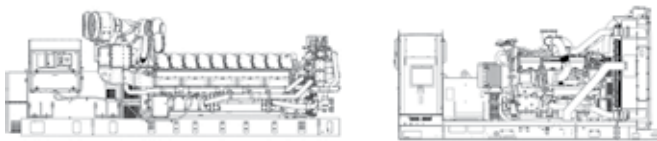
- Fuel Level
- Modbus connection
- Communication options:
Cellular, GPS, Phone, Internet

www.Gen-Tracker.com

Continued from page 10

Ring Power®

is interested in purchasing your
USED GENSETS



**Call: Lyndon Schultz 904-494-1278
Steve Ferlita 904-494-1238**

tricity,” however another member of the same panel disagreed.

What I found interesting was that companies I was familiar with as manufacturers or builders, like ABB and Black & Veatch, are now migrating into software for utility usage to ensure stable operation and Smart Operations. Grid Security was also a big topic, with many high ranking industry officials as presenters and panel members. What smart metering can do for the utility customer was also another hot topic, as many utilities are looking at what they can do to help the customer understand how to lower their electric bill and how utilities can use these results to keep from building new power plants – more distributed generation.

IS8178-1 Reciprocating Internal Combustion Engines – Exhaust emission measurement – Part 1: Test-bed measurement of gaseous and particulate exhaust emissions is up for ballot comment. The closing date is August 17, so if you have any comments or changes you want made to this document, please contact me as soon as possible. ■

power generation issues?

we've got solutions



www.annainc.com

Sunbelt Transformers **NEW Packaged Products** Division

OUR **PACKAGED PRODUCTS** DIVISION HAS THE **KNOWLEDGE AND EXPERTISE** TO BUILD COMPLETE PACKAGES AND TO PROVIDE **COMPLETE TURNKEY SOLUTIONS** FOR OUR CUSTOMERS.

SUPPLYING: Transformers, Transfer Switches, Switchboards Distribution Panels, Disconnects, Circuit Breakers, Mobile Substations & More!



SELL · RENT · REPAIR · SERVICE · BUY

Domestic: 800-433-3128 · International: 305-517-3657

Sunbeltusa.com



To obtain a quote on your next project, please contact **Aaron "A.J." Jones, P.E.** our Sales and Applications Engineer at ajones@sunbeltusa.com or call toll-free **1-800-433-3128!**

The Sales Landscape is Changing. Are You?

By: Thomas Black – Strategic Account Manager at ASCO Power Switching & Controls, a Division of Emerson Electric.

Manufacturers, dealers, and representatives in the power generation industry are witnessing an emergence of the sales path called, “National Accounts.” When local sales personnel hear those two words, they immediately feel threatened. On the surface this appears like a simple way for manufacturers to increase profits at the expense of the current sales network. This article highlights why this is happening, the growing success of national accounts, how local dealers can participate, and the long term financial opportunities.

Let’s look at WHY national accounts are here and growing. The catalyst behind national accounts is the changing purchasing patterns of large companies and national chains. Changes in purchasing that have forced manufacturers to implement plans to address these new dynamics. Manufacturers began to identify and create strategies while balancing and harmonizing these new national account sales members with local distribution partners.

The Drivers That Have Forced These Changes Include:

- Multi-State customers that outgrew local sales capabilities – In many areas of the country, local sales entities lack the ability to provide consistent customer service, experience and pricing control over a large geographical area.
- States often have codes and standards that might be unknown to the sales channel from another State.
- Customers are exposed to channel conflict when equipment is parachuted into another territory without notification.
- Customers are demanding a direct relationship with key manufacturers.
- Ability to eliminate multiple markups on equipment.
- Customers demand control over product selection, pricing and standardization of quality.

Manufacturers who were listening to the customer quickly realized a change was needed. That change was the creation of a factory-direct channel (or more popularly referred to as a “National Accounts” sales team). With change comes conflict and fear. From the lens of the local sales force, National Accounts are factory salesman here to take what they already have. Manufacturers realized a much broader view was required. National Account teams were created to address existing gaps in current sales strategies.

These Gaps Included:

- The long sales cycle. Targeted national account customers can take years to win over. These customers usually require multiple trips to manufacturing facilities, corporate headquarters and existing jobsites to verify product quality.

- How to seamlessly handle multi-State customers and to create linkages between local sales teams.
- Strengthen existing customer’s relationships. Protect the business we have today.
- Coordinate and execute international opportunities.
- Introduce and build new corporate relationships. Identify opportunities for growth sooner and share best practices.
- Create a top down strategy with a consistent message used by all local sales groups.
- Internal truthful, honest non-biased look at what we do well and where we could improve.
- Identify unmet needs and validate new and existing national accounts prospects.

Now that We Have Examined the ‘What’ and ‘Why’ of National Accounts; Let’s Explore the Benefits...

The biggest difference between national accounts sales and local sales is the perspective. National accounts have a global vs local view of existing and emerging market trends. National account sales teams forecast future needs and requirements driven by government regulations, codes and standards and technology advancements. National accounts have the ability to increase revenue and bring in higher margins. They help strengthen the company’s reputation as an industry leader and provide a global prospective on competitors’ strengths and weaknesses.

Partnering with existing local distribution to ensure all touch points with the customer are in place is also paramount! This includes attending meetings, commissioning new equipment and servicing existing products. In many instances, the national accounts team provides a conduit between local distribution and the manufacturer.

How about the Customer, what value do they receive from this new approach to sales? What is different and how do they gain in this process? Traditionally, the sales effort focused on purchasing and engineering groups. National account sales teams provide this coverage and include the next level of management. It’s been proven that a focused sales effort targeted at Senior Executives has significantly increased Corporate to Corporate communications and trust.

Customers obtain consistent pricing and quality products with a focused professionalism towards delivering a “Premium Customer Experience.” These national account customers desire a direct connection with the headquarters of their key suppliers and they value the relationship with senior management. This arrangement enables the customer to gain control of product selection vs the traditional channel where multiple contractors are involved and vendors are substituted without the owner’s knowledge.

WE BUY GENERATORS

Free and fast valuations!

Immediate payment. Nationwide. Just send us a picture with kW rating (over 200 kW), voltage, engine mfg., and hours of operation—we'll send you a cash offer in 24 hours.



We also buy surplus gas compressors, cylinders, engines, gas turbines.

POWER & COMPRESSION SALES | MARK: 925-935-5700 | powcom@comcast.net



pritchard brown

protecting
technology
and the
world



State-of-the-art shelters and system integration.

- ISO-9001 Certified
- 70,000 ft² of manufacturing space
- Strategically located for domestic and worldwide markets
- Over 65 years of experience
- Turn-key systems available
- Available Certified IBC Seismic Compliance
- Professional sales and engineering staff
- High performance, maintenance free materials
- Unparalleled customer service
- Expertise in code compliance, extreme sound attenuation and challenging applications

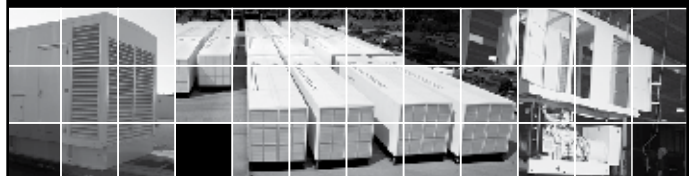


Like Us

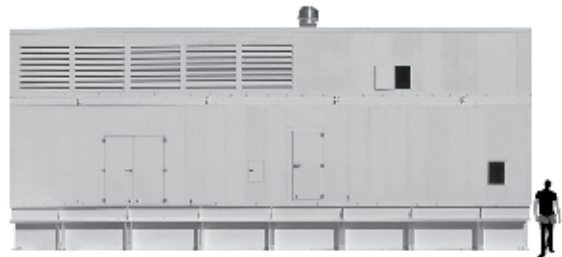
BALTIMORE, MD

800.231.2258

WWW.PRITCHARDBROWN.COM



Our best work begins by thinking outside the box.



Our best ideas go inside.

At Robinson Custom Enclosures, our state of the art design begins by thinking outside the box. We custom design each enclosure package to meet the customer's need in the most cost-effective way possible.

WHERE CUSTOM IS STANDARD

ROBINSON
CUSTOM ENCLOSURES

1740 Eisenhower Drive | P.O. Box 5905
De Pere, WI 54115-5905

920-490-3250 | Fax 920-617-3308 | www.robinsonenclosures.com

In the beginning of this article, we touched on the harmonization of sales channels and the potential for conflict between national account personnel and local established distribution. Conflict undoubtedly surfaces when tough decisions regarding credit for sales, commission payments and communications with the customer are debated. This is an area where many manufacturers make costly mistakes. They sometimes fail due to short sightedness and greed. Manufacturers need to consider the long term benefits of financially-strong local sales entities. Manufacturers should be reminded that the majority of national account customers most likely first purchased their equipment from local dealers. These local sales companies are the face of the manufacturer and provide valuable local knowledge and support. Manufacturers that support local distribution and allow them to participate in the national accounts programs are positioned to provide a strong cohesive team approach. Manufacturers should consider paying a commission for purchase order location and the territory that the equipment is shipped to. Paying commissions to the local sales team builds confidence and trust. When trust is established, local distribution is more inclined to bring potential customers to the national accounts group. Local dealers want an opportunity to earn a commission while providing long term customer support through service and maintenance. Manufacturers that allow local distribution to participate and share in the rewards of a successful national accounts program have limitless future opportunities. ■



Example of Retail Company Distribution Center Locations

About the Author:

Thomas Black – Strategic Account Manager at ASCO Power Switching & Controls, a Division of Emerson Electric.



Thomas attended his first EGSA meeting in 1997 and is responsible for recruiting many past and current EGSA members. He has 25 years of distributed onsite power generation experience and has successfully launched and managed two Engine Generator distributorships. Tom’s executive experience includes mergers and acquisitions, raising capital, corporate governance, formations of board of directors and recruiting highly talented and successful employees. Thomas brings this knowledge and openly shares with other EGSA members.

Thomas is a proven visionary and has ventured into cutting edge technology development and commercialization. These technologies included, CHP, Fuel Cells, Turbines, and Renewables. In his current role with ASCO Power Technologies, he provides strategic direction and sales implementation of multiple National Accounts.

Strength to Ride Out the Storm



phoenixproducts

904-354-1858
PHOENIXPRODS.COM

DESIGN • MANUFACTURE • INSTALLATION SUPPORT • SERVICE



- Free Standing Liquid Storage Tanks
- Fuel Delivery Systems
- Generator Sub-Base Fuel Tanks
- Day Tank Systems
- Custom Equipment Enclosures
- Custom Containerized Solutions

Editor's Note:

In recent months our members have placed a higher value on fuel hygiene and quality. EGSA hosted a member panel discussion on these topics at our 2015 Fall Conference and from there, several articles have been submitted. We have also received a few inquiries!

Thank you for having a voice in On-Site Power. Here are a couple of articles that we hope you will enjoy.

Today's Modern Diesel Fuel

By: Dan Bigelow – CEO/COO - Separ of the Americas, LLC & Brian Boezi, President/CEO – B3C Fuel Solutions

“This isn't your grandpa's diesel”. This statement rings true of today's modern diesel fuel, particularly with the proliferation of biodiesel and low sulfur diesel. Today's diesel fuel contains many types of contaminants; all of them harmful to fuel or engine systems. This is why it is critical to have a fuel maintenance plan that is just as modern as today's diesel fuel.

Most of us are familiar with common petroleum diesel fuel. But what about biodiesel and low sulfur diesel which are becoming more common? Biodiesel is a clean burning alternative fuel produced from vegetable oils or animal fats (lipids). It is often blended with petroleum diesel to create biodiesel blends with 5 to 20% bio content common in the United States (i.e. B20 = 20% bio and 80% diesel). Ultra Low Sulfur Diesel (ULSD) has a dramatic decrease in sulfur (from up to 1000 ppm in the past to around 15 ppm in ULSD). Again, this is great for the environment as it reduces emissions, however, it is not great for older engines (2007 and older).

While your grandpa's diesel was stable, today's modern diesel fuel is inherently unstable and the quality degrades over time. The proliferation of biodiesel blends and ULSD only exacerbates the problems. According to a multinational oil and gas corporation, “as a guide, we would suggest that if held for longer than a period of 6 months, the product could be expected to deteriorate in quality.” A similar corporation stated, “if you keep it clean and dry, diesel fuel can be stored 6 months to 1 year without significant quality degradation; of course we do have to consider temperature variations and other atmospheric conditions (humidity, etc.) in these estimates, hence 6 months being a fairly standard duration.” The words, “If you keep it clean and dry” should be highlighted.

leaves more harmful contaminants into the fuel and atmosphere within the tank. The proliferation of detrimental contaminants continues, including rust and sediment, biofilms, asphaltene (solid particles in crude oil / diesel fuels that are not soluble in fuel), gums, and sludge. What is sludge? Sludge is inorganic debris such as rust, sand, dirt and more. Sludge can never be reunited with fuel, is extremely acidic, and will harm engines. Another issue with ULSD is that it causes the formation of wax crystals. This contamination continues to develop both above and below the fuel line causing issues throughout the entire tank. Moisture and contamination above the fuel line is evident as seen in the image of this rusty tank filler neck (fig. C).

Another issue with biodiesel and ULSD (Ultra Low Sulfur Diesel) is that they have

a solvent effect (acting as a cleaning agent), releasing particles (fig. D). And, every time you add diesel fuel into a tank with existing fuel, it churns the existing stored fuel, mixing water and dirt with the fuel. This is commonly called the “Snow Globe Effect”.

Other factors continue to cause accelerated aging and destabilization of fuel. This includes issues caused when fuel comes in contact with zinc, copper, or metal alloys containing these elements. These metals will quickly react with diesel fuel to form unstable compounds. Exposure to dust and dirt which contain trace elements of copper and zinc can also destabilize the fuel.

Given the inherent issues with fuel (like water) and negative forces of contamination, combined, working against diesel fuel, all of these issues are compounded. It is easy to see how fuel quickly becomes and stays contaminated.

Let's consider these words again, “If you keep it clean and dry” and the fact that major oil and gas corporations lean toward 6 months as a bench mark for maintaining fuel prior to significant deterioration. The purpose of fuel is to run your equipment. What's in the tank is what ultimately ends up in your engines. And, today's engines are more sensitive than in the past, so



Figure C: Rusty Tank Filler

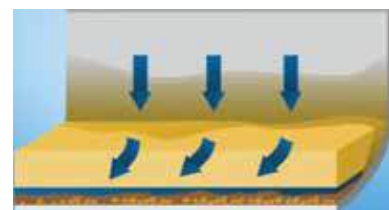


Figure D: Solvent Effect of Biodiesel and ULSD



Figure A

What's in Your Customer's Tank?

First and foremost, diesel fuel and biodiesel inherently contain WATER. Water is the greatest enemy to fuel and engine systems and NO AMOUNT OF WATER in your diesel fuel or equipment is acceptable. In addition to being inherent in diesel and biodiesel, water is caused by such things as condensation from temperature fluctuations and high humidity, external leaks in tanks, biodiesel blends. As an example, bio-fuels are hygroscopic, absorbing water from the atmosphere. Water will separate out of the fuel, sit on the bottom of a fuel tank (fig. A), and provide a breeding ground for microbial growth (fig. B - bacteria, mold, yeast, fungus). In fact, organic compounds make up about 90% of the contaminants found in fuel. A vicious cycle begins in which the microbial growth re-



Figure B: Microbial Growth from Tank

ISO 4406 Definition of Particles

Fuel Status	ISO Code 4406	Particle Counts (per Milliliter Fluid Sample)	Comments
Fuel Supply Unacceptable	22	Up to 40,000 particles > 4µm	Typical levels of incoming fuel (Primary source of fuel contamination)
	20	Up to 10,000 particles > 6µm	
	18	Up to 2,500 particles > 14µm	
Tank Filtration	18	Up to 2,500 particles > 4µm	Maximum recommended by engine manufacturer (Second leading source of contamination)
	16	Up to 800 particles > 6µm	
	13	Up to 80 particles > 14µm	
On Board Filtration	15	Up to 320 particles > 4µm	Preferred by engine manufacturer
	13	Up to 80 particles > 6µm	
	10	Up to 10 particles > 14µm	
HPCR Acceptable	12	Up to 40 particles > 4µm	Preferred by fuel injector manufacturer
	9	Up to 5 particles > 6µm	
	6	Up to .64 particles > 14µm	

Figure E

Figure F

In this example, you can see how the particles measured at the given micron levels are assigned the specific code based on where that value falls in the table. For this example, the ISO code would be 20/17/13.

Table 1

MICRON LEVEL	PARTICLES/ML	ISO CODE
>4 microns	9,721	20
>6 microns	1,254	17
>10 microns	326	13
>14 microns	73	13
>21 microns	12	
>38 microns	5	
>70 microns	0	
>100 microns	0	

MORE THAN (p/ml)	UP TO AND INCLUDING (p/ml)	ISO CODE
80,000	160,000	24
40,000	80,000	23
20,000	40,000	22
10,000	20,000	21
5,000	10,000	20
2,500	5,000	19
1,300	2,500	18
640	1,300	17
320	640	16
160	320	15
80	160	14
40	80	13
20	40	12
10	20	11
5	10	10
2.5	5	9
1.3	2.5	8

engine issues are becoming more prevalent. Clean, well-maintained fuel leads to clean and efficient running equipment with fewer maintenance needs, less downtime, and lower operating and repair costs. Of course, it only makes sense that one would want “clean and dry” fuel that lasts longer and that does not clog filters or damage equipment.

Let’s add another level of complexity. Although the contamination process really ramps up in the tank, delivered fuel is typically less than optimal at the time of delivery. We already know that water is inherent in the fuel, but what about particulate contamination? The standard in measuring fuel cleanliness is ISO 4406 (fig. E). This standard assigns a code number that correlates to the quantity and size of particles per milliliter in a fuel sample. The ISO code is expressed by three separate numbers, that relate to the quantity range of particles that are greater than 4, 6, and 14 microns in that respective order. For example, an ISO Code 20/17/13 (fig. F) would mean that in the given fuel sample there are 5,000 - 10,000 particles per mL that are 4 micron or above; 640 - 1,300 particles per mL that are 6 microns or above; and 40 - 80 particles per mL that are 14 microns or above.



Figure G

To give this perspective, the human hair is 100 microns in diameter. The typical ISO code of an incoming fuel supply is 22/20/18. Major engine manufacturers recommend that a diesel tank be maintained ISO 18/16/13 level and inline filtration provide a cleanliness of ISO 15/13/10. Fuel injector manufacturers request an ISO cleanliness of 12/9/6. So, once fuel is delivered it starts at ISO 22/20/18, and needs to be filtered down to ISO 12/9/6 before it is acceptable to be used at the fuel injector.

In summary, we know that diesel fuel has inherent contamination, including water and particulate matter and is not delivered “safe” for engines and fuel injectors. We know that NO AMOUNT OF WATER is acceptable. It is also clear that once the fuel enters the tank, the water and contamination issues only become worse and are compounded by the proliferation of modern low sulfur diesel and biodiesel fuels. For these reasons, fuel will tend to degrade within 6 months (and more likely less) before it is considered no longer acceptable to use. Consider standby generators in which the fuel can sit for years before it is needed. And it is this same contaminated fuel that enters your equipment and today’s more sensitive engines, causing problems that lead to costly repairs and downtime.

What Can You Do?

A clean, dry, healthy fuel system is not something that just “happens”. A healthy fuel system is free of water, particulate matter, and microbial contamination (i.e. good “fuel hygiene”) and requires a proactive plan of action to eliminate and prevent fuel contamination.

A suggested plan and options include:

a. Start with Testing:

- i. Lab Testing: Leverage a third-party resource. Example tests include:

1. ISO 4406 Particle Count
2. ASTM D4739 Base Number (BN)
3. ASTM D4377 Karl Fischer Water Determination
4. ASTM D664 Acid Number (AN)

- ii. Quick Test: An example quick test option is a diesel 4 in 1 Test Swab (fig. G) that identifies fuel quality, water, and contamination including rust, sludge, and asphaltenes.

b. Eliminate Contamination if Present (Reactive):

- i. Biocide: If microbial contamination is present, treat the fuel with a Diesel Fuel Biocide. A note of caution, when using biocide, you will need to separate or remove the dead particles from the fuel. Once a preventive plan is put in place, biocide is not necessary on an ongoing basis.
- ii. Polish and Clean the Fuel: Off-machine procedures, such as fuel-polishing, can be performed by a service company on an ongoing basis. Often, these procedures are effective, but reactive in nature.

c. Control the Water on an Ongoing Basis (Proactive):

- i. Install a Diesel Tank Water Absorbing Device: Keep a Diesel Tank Water Absorber (fig. H) in your equipment or bulk tank at all times for continuous water removal and prevention of sludge, bacteria, algae.



Figure H

- ii. Automatic Fuel Polishing System: Increased filtration can be built into the fuel system (automatic).

- d. Treat and Stabilize the Fuel: Use an additive / stabilizer that is engineered for use in generator and storage applications. Familiar “shelf additives” are not typically effective for long-term storage. Treat the fuel in the fuel tank with an additive/

stabilizer that will protect the entire diesel fuel system from corrosion and oxidation, and stabilizes the fuel as it ages. A good fuel additive will protect the fuel system and extend the life of the tank and engine components.

It is critical to understand what's happening in your customer's tank by becoming a "fuel expert". By thoroughly understanding the "mechanics" of today's modern diesel fuel and how it affects fuel tanks and equipment, you can become a trusted source for your customers and you will be able to offer proactive fuel maintenance solutions. Not only will these solutions help prevent and resolve your customer's issues, but these solutions offer you a tremendous new revenue generating opportunity. This may not be your grandpa's diesel, but you can certainly leverage today's modern diesel for positive customer support and support for your bottom line. ■

Editor's Note: Dan Bigelow is an active member of EGSA since 2011, participating in numerous ways in the organization including a recent panel discussion during the General Session at the EGSA Fall Conference in 2015. Both he and Brian Boezi were panel members. That appearance was Brian's first EGSA event!

About the Authors:

As the CEO/COO of Separ of the Americas, LLC, Dan Bigelow is responsible for the corporate direction of both Separ of the Americas, LLC, which is the North & South American distributor for Separ Filter, a diesel fuel water separator that is manufactured in Germany and he is also the COO of Reverso Pumps, Inc., one of Separ's partner companies that manufactures their oil change systems and diesel fuel polishing systems.



As the President/CEO and chief scientist of B3C Fuel Solutions, Brian Boezi has combined his knowledge of engine mechanics and his unique expertise in the field of chemistry to develop products and solutions that resolve modern fuel related issues.



With more than 25 years of experience, Brian is also sought by major industry participants to consult about problem discovery and resolution. His results are verified through third party testing, endorsements from major engine manufacturers, as well as customer feedback and testimonials.

Regular Fuel Monitoring Supports Generator Reliability

By: Mark Stellmach, President of Fuel Management Services

Onsite power systems need to fire up on demand every time they are called. To ensure readiness, every component of the system must be properly maintained, and that includes the diesel fuel in the tank.

It is easy to take the fuel for granted, but as a longtime fuel quality specialist who has encountered more than a few fuel suppliers cutting corners in pursuit of larger margins, I am here to tell you that you're best off taking preventive measures at every stage.

In this article – a follow-up to *Reliable Backup Needs Reliable Fuel* in the March/April issue of *Powerline* – I'll highlight diesel fuel analysis and why testing is imperative. Diesel fuel reliability is the heart of our work at Fuel Management Services, and routine fuel analysis may very well be the most important step an operator can perform to ensure fuel reliability. Through fuel testing a generator operator or service department can keep an eye on the mission-critical fuel storage system. Learning the condition of fuel and monitoring for fuel tank contamination are essential steps to head off problems that could knock a generator offline.

Based on testing results, operators and service teams may take corrective action to improve fuel quality, eliminate contamination, and ensure trouble-free fuel. If no corrective action is necessary, that's great. The main point here is that without periodic fuel analysis there is no way of knowing what is happening inside the fuel tank. And as I pointed out in my last article, a lot can be happening in your fuel and your tank, and what you don't know can be a real problem.

Get Serious About Fuel Quality

The best first step for preventing problems with your fuel, tank and components is to ensure that you are buying only high-quality fuel. Take nothing for granted. The vast majority of fuel suppliers will deliver quality diesel every time, but as a buyer, you want to put your supplier on alert that you are paying attention. Here are some simple, common sense procedures that every fuel buyer should follow when receiving delivery to their generators.



First, find a reputable fuel dealer.

Second, inform your fuel dealer how critical it is to have top quality fuel delivered to your generator. Communicate the seriousness of your business: If you are a hospital, for example, fuel quality could be a matter of life and death. Also, communicate to the fuel dealer that you are instituting a fuel quality assurance/quality control (QA/QC) program to ensure fuel integrity.

These two simple steps cost nothing and show your supplier that you are serious about the quality of the fuel being delivered. You are putting some responsibility on the supplier not to cut corners by selling inferior diesel or biodiesel.

The third basic measure to enact is to obtain a fuel sample from the delivery truck. Put the fuel sample into a clear glass jar and do a simple visual inspection. This action is also a no-cost action that puts your supplier on alert. When the delivery driver goes back to his supervisor and tells him how particular you are, it shows a level of oversight that gets their attention and positions you as an informed buyer.

Once you have enacted these procedures, you'll most likely have made your fuel supplier a bit nervous – and that's not a bad thing. Believe me, if you saw the "price is king" dealing that some fuel suppliers do to add one 10th of a cent to their margin, you would be surprised. Again, these are simple, no-cost steps you can take to help shore up the front end of fuel delivery.

Monitor on an Ongoing Basis

Once you have your diesel fuel in the tank, you cannot afford just to forget about it for months or years on end. There is too much at stake in terms of both generator readiness and the integrity of storage tanks and fuel-system components.

The days of ignoring stored diesel fuel went away when refineries revised their practices, first to derive more usable products from every barrel of oil and then to meet new specifications on sulfur content. As I explained in the last article, ULSD and biofuels are chemically different than the higher sulfur fuels we used to use. These modern, mandated fuels have different properties and characteristics that, if not routinely monitored, can be very troublesome. These are dynamic liquids that have shown strong propensities to corrode tank walls and fuel system components and to cause fouling problems throughout fuel

storage and fuel metering systems. You can imagine what corrosion and component fouling can do to negatively affect reliable generator operation.

To protect your equipment and ensure reliability, you need a fuel condition monitoring program as part of your regular operations or your service contract. With a program of periodic, routine fuel laboratory analysis to identify the conditions of the fuel and the storage tank environment, you can cost-effectively prevent and mitigate any problems that might be lurking.

What we are recommending is a practice of "condition monitoring" for diesel fuel. Wikipedia defines condition monitoring as "the process of monitoring a parameter of condition in machinery in order to identify a significant change which is indicative of a developing fault. It is a major component of predictive maintenance." A generator can run reliably without every nice bell and whistle available, but it cannot run without fuel. Fuel that has quality or contamination issues is a serious barrier to reliable performance.

A perfect analogy is the practice of monitoring the conditions of your health through periodic routine exams that normally include laboratory blood testing. The purpose of this practice is to detect any deficiencies or problems that may need attention. Subsequent diagnosis – if any – then leads to recommended corrective action of some sort before a condition worsens. Diesel fuel can be considered the lifeblood of a generator engine, and it is only logical to have that vital fluid checked regularly. The same purpose and reasons for human blood testing can be transferred to diesel fuel testing. Just as a human ages and body chemistry changes, so goes it with today's fuels. With proper diagnosis, any fuel deficiencies or problems can be identified, and recommended corrective action taken. Tests might also confirm that the fuel and systems are in good shape, and there is no cause for concern.

Testing Parameters

Let's conclude this examination with a brief introduction to fuel testing parameters – a topic I will explore in greater detail in a subsequent article. There are many different analysis parameters that a reputable fuel laboratory can perform. The most common approach is to use ASTM testing procedures, which are widely accepted.

SAVE TIME. REVOLUTIONIZE YOUR OPERATION.

Create a mobile fluid exchange system tailored to your needs. Vacuum technology is cleaner, faster, safer and easier to maintain. With Sage Oil Vac lube equipment, you will have the right size and right number of tanks engineered for the roughest environments. Your jobsite will become an efficient work space with the ability to operate and fill remotely from the ground.



Sage
OIL VAC

WANT TO LEARN MORE?

CALL 877-OIL-VACS OR VISIT
LUBEBUILDER.COM

Spurring

On the Next

50 Years



EGSA
2016 Spring
Conference
San Antonio, TX
March 20-22



EGSA Thanks Our 2016 Spring Conference Sponsors!

On behalf of the EGSA Board of Directors, we wish to thank our generous sponsors who have continued to help promote the EGSA brand by committing resources that assist the organization in bringing greater value in our 51st year! Our turnkey sponsorships are cost-effective for our member firms and help EGSA offset event costs and keep your registration and networking excursion costs low. We'd like to express our gratitude to the following EGSA Members that made this event successful:



ULSD and biodiesel that are sold by reputable refiners and blenders meet clearly defined ASTM specification requirements when they leave the refinery. Oversight at the refinery level ensures that any fuel distributed and sold as ULSD meets minimum ASTM specifications.

Biodiesel undergoes similar oversight, but there is some variability. Not all biodiesel is created equal, even if it meets specification. The different available feed stocks (soybean oil, animal fat, etc.) and blending methods can create challenges to fuel quality and necessitate different storage and handling standards. The biodiesel industry operates the BQ-9000® program, which enables refiners and marketers to achieve quality assurance certification by maintaining high standards for adherence to specifications. By choosing only BQ-9000-certified marketers, buyers give themselves extra protection on fuel quality. Non-BQ-9000 marketers generally produce fuel that meets the ASTM biodiesel specification (D6751), but there are exceptions. Determine whether you are buying diesel-biodiesel blends, and ask your supplier what they do to ensure the quality of their fuel blends.

ASTM specification testing in a lab simply results in a determination that fuel is in fact diesel or biodiesel fuel. Testing parameters are important to prove the fuel is fit to move out of the refinery, but in short order most of those ASTM specifications become irrelevant. The takeaway here is that just because a diesel fuel meets ASTM D975 specification at the refinery, there is no assurance as to the reliability of that fuel once it moves through the complex distribution chain and is eventually placed in a generator storage tank. There are many points of potential contamination along that chain,

and liquid fuel is dynamic and can change state quickly.

Herein lies the challenge, because most ASTM D975 specification tests are not applicable to the fuel once it moves out of the refinery and is placed in your storage. Fuel testing done post-refinery should be applicable to potential contamination types and relevant to the changes that fuel undergoes. ■

About the Author:

Mark Stellmach is President and Owner of Fuel Management Services, which supports the On-Site Power Industry with fuel quality expertise. Mark has 24 years experience helping fuel providers and service companies improve the quality and reliability of their distillate fuels.



He uses his expertise in the properties and characteristics of middle distillate fuel chemistry while relying on the company's world class fuels laboratory. With a deep and thorough understanding of fuel properties, Mark helps companies navigate the challenges to fuel quality in storage and provides them with treatments and test procedures that minimize fuel-related problems and optimize equipment performance. Mark has extensive experience managing ultra-low sulfur diesel (ULSD) fuel under all conditions. He is well versed in fuel refining, fuel contamination, fuel additive chemistry, and corrosion control for storage tanks and fuel distribution systems. He has provided support across several industries, including emergency power, utilities, diesel transportation, military, and heating oil delivery.

Support the EGSA TOYA in 2016!

Take a Look at Our EGSA Technician of the Year Award Program and Nominate a Worthy Candidate!

Get ready to shamelessly promote your EGSA-certified colleague by nominating him (or her) for the 2016 EGSA TOYA!

Every one, at every level, wants to be recognized for doing a great job! The TOYA is **THE** capstone to any technician's career, inciting further personal and professional growth. Can you imagine the competitive advantage of having a TOYA winner on YOUR team?



The 2016 process is scheduled to kickoff as follows:

Application Announcement:

May 16, 2016

Application Period Ends:

July 15, 2016

Review of Applications Takes Place:

July 16 – July 29, 2016

Final Winner will be Notified:

August 1, 2016

The Rest of the World Finds Out:

During the exciting announcement at the Awards Banquet in Sacramento, CA on Monday, September 12, 2016.

Electrical Generating Systems Association (EGSA) • 1650 South Dixie Highway, Suite 400, Boca Raton, FL 33432
(561) 750-5575 • EGSA.org • email@EGSA.org

Your application
deserves
superior sync-check
protection!



Eliminate equipment damage
with the new
microprocessor based
ES-25 relay

- Slip frequency calculation prevents closure of output contacts outside phase angle window.
- Independent voltage and angle settings allow for tighter acceptance windows.
- Phase angle and voltage are matched to minimize transient disturbances.
- A wider voltage difference range setting (5-30%) than other industrial relays.
- Go to www.basler.com/register to create your account and get helpful Application Notes and Instruction Manuals.

The new ES Series Protection
Relays:

EASY TO SET
EASY TO OPERATE
EASY TO UNDERSTAND

World Headquarters
Highland, Illinois, USA
Tel: +618 654 2341
info@basler.com

Suzhou, PR, China
Tel: +86 512 8227 2888
chinainfo@basler.com

Singapore
Tel: +65 6844 6445
singaporeinfo@basler.com

www.basler.com/be-ESRelays

Benefits of UL Listed Factory-Built Positive Pressure Chimneys for Engine/Generator Exhaust

By: Keith Page, Technical Product Manager for Selkirk Corp's Commercial and Industrial Venting and Chimney.

In recent years, I have been told to “stop being cheap and buy the good stuff, then maybe it’ll last longer.” This piece of advice could not be wiser when selecting exhaust ductwork for commercial auxiliary power equipment (engine and generator sets). In today’s world, safety and prevention has become one of the preeminent topics of concern in regards to construction and building design. Therefore doing things the “old” way is becoming just that, “the old way.”

For decades, the UL listed positive pressure chimney stack has been used extensively and almost exclusively on commercial boilers. This same pressure stack is also suitable and has been used for generator exhaust, along with many other applications such as kitchen grease duct, process oven exhaust, laboratory fume hoods and others. While the latter uses are far less frequent than commercial boilers, the use for generator exhaust is still widely specified and implemented. Annually, there are approximately 500 generator exhaust job sites utilizing UL listed, factory-built, positive pressure chimneys. However, while the use seems frequent, I am certain there are still more converts out there that will soon realize the benefits of factory-built chimney systems for their generator exhaust.

In recent years, the code authority in Ontario has mandated that all generator

exhaust ductwork be listed, factory-built chimneys instead of black iron pipe with a field wrapped, calcium silicate blanket. Their reasons to use these factory-built chimneys are to have a consistent, safer, UL listed product with reduced clearance to combustibles and to align with the many other heat generating appliances that require listed chimneys and vents.

Let's get into the benefits.

SAFETY & PERFORMANCE: These chimneys go through the rigorous testing of the UL 103 chimney standard, which evaluates thermal testing (1000°F & 1400°F continuous operation) to determine various clearances to combustibles, mechanical strength & load tests (including wind) and 60" w.c. pressure capabilities. Because of these strength tests, factory-built chimney support spacing is often less than that of general utility pipe support spacing. Most of these systems connect together using a strong, internal, V-band bolted connection, which has a high temperature sealant field applied to it. The multiple double wall insulated model types and material options give specifying engineers the ability to customize the generator exhaust system to their job requirements (clearances, skin temperatures and corrosion resistance). The 20 gauge inner wall has (2) 300 series stainless steel options to choose from, while



the 24 gauge outer wall has (3) material options (aluminized steel and (2) 300 series stainless steel). The pipe system connection methods do not require any type of welding, therefore minimizing or eliminating any need for additional job site safety requirements related to welding. Seismic testing has also been evaluated on this modular chimney exhaust duct and rendered highly favorable results. These systems incorporate thermal expansion devices and excessive pressure relief valves to address additional safety concerns and to maintain the integrity of the exhaust duct.

THE EXTRAS: The outer wall renders a very aesthetically pleasing look when compared to traditional black iron pipe and field wrap. Factory-built chimneys come with a standard warranty and have other multi-year warranties available. Detailed system layouts of part-by-part drawings and schematics are provided and can be implemented into BIM software. Computer generated sizing calculations are also available to determine the exhaust flow characteristics based upon the generator output and the layout of the chimney exhaust.

It's widely known that the most popular uses of auxiliary power systems are implemented into medical facilities, data centers, government buildings and casinos, where power outage is not an option.

However, it is lesser known that many of these facilities have used factory-built chimneys to route the exhaust through their building, which offers the safest and most value added installation design available today. ■

About the Author:

Keith Page is the technical product manager for Selkirk Corp's commercial and industrial venting and chimney. He began his HVAC career 14 years ago in product engineering and field application support before moving into a product manager and sales support role. He currently is a committee member of NFPA 211 and sits on several UL venting and chimney technical committees. He is also a member of the West Michigan Ashrae Chapter. He holds a BSME from Michigan Technological University and a MBA from Grand Valley State University.



Basler Electric

True power protection for critical applications!



Prevent false trips with the new microprocessor based ES-32 relay

- Superior to other 32 devices that sense only directional current.
- Prevents damage due to reverse power flow, such as generator motoring caused by loss of prime mover torque.
- Real power measurement better replicates actual system power flow.
- Operates on fundamental component of sensed voltage and current to filter out all harmonics.
- Go to www.basler.com/register to create your account and get helpful Application Notes and Instruction Manuals.

The new ES Series Protection Relays:

**EASY TO SET
EASY TO OPERATE
EASY TO UNDERSTAND**

World Headquarters
Highland, Illinois, USA
Tel: +618 654 2341
info@basler.com

Suzhou, PR, China
Tel: +86 512 8227 2888
chinainfo@basler.com

Singapore
Tel: +65 6844 6445
singaporeinfo@basler.com

www.basler.com/be-ESRelays



Hitting the Books at an EGSA Conference! What's in it for our Members?

As Power Generation professionals and active members of EGSA seeking new ways to elevate our industry at-large should come naturally. One of the best ways that we accomplish this goal together is through our memberships' educational offerings.

During our EGSA Spring Conference, EGSA executed a test run by offering a specific module of our EGSA Rowley School curriculum in San Antonio. We were pleased to find out that there is a market for our members coming in a bit early on Sunday to take advantage of such a course, so we are looking to add that as a permanent feature (for the foreseeable future) to our Spring and Fall conferences, dependent upon member response.

For our Spring Conference in March, Brian Ponstein of MTU Onsite Energy conducted a class from the EGSA Advanced School called "Sizing to Service." This 3-hour module addresses specific considerations in sizing and installing a genset. The "Sizing to Service" module was offered from 1:00 pm until 4:00 pm on Sunday, March 20, 2016. With Sunday being the arrival day for our typical 3-day conference (Sunday – Tuesday), we had 15 students that made plans for arrival earlier that day.

Here are a few additional items we'd like to make you aware of related to future educational offerings:

1. Do you have a course in mind that you would like to see offered at a future EGSA Conference? If so, let us hear from you at e-mail@egsa.org, with a subject line of **Conference Education Offerings**.
2. You do not have to be a registered attendee of a conference to take advantage of the future offerings. If you have engineering contacts in Sacramento for example, why not ask them to take advantage of the course for the Fall?

More details will be provided when the Fall Conference micro-site is launched during the first week of July.

Member Testimonials:

"I found the material presented to be relevant and comprehensive. The presenter was well versed, engaging and respectful of the knowledge of those in the class. My expectation, this is destined to be a great EGSA offering geared to sales and those that support sales, not just technicians seeking EGSA certification. I appreciated the opportunity to participate in the inaugural presentation of Generator Sizing."

Steven Belcher, Special Accounts Project Manager - FM Generator

"The class was very informative and appropriate for the audience that was attending the EGSA conference. I do not have a week to set aside to take the EGSA Advanced Power Systems class but I can be available for a few hours in the afternoon on the first day of the EGSA conference. The Sizing to Service class that was offered in San Antonio and was taught by the MTU Engineer was very well done and worth attending."

Keith Heid, Sales Manager - Fidelity Power Systems

"Being an EGSA instructor is one of the more enjoyable things I get to do. Not only did the class gain information from what was taught, but I too learned a few things from the experiences of those taking the class."

As many EGSA members deal with a small part of the overall power system, it is nice to have classes where individuals can take a class to learn about other areas of a power system.

We have all had an EGSA member as a mentor at some point and EGSA is known for sharing knowledge and helping one another. It is items like this class that offer EGSA members a way to get more out of their membership and learn from one another.

EGSA has a vision to unite and share knowledge and this is just one of the many ways EGSA is fulfilling this vision.

This session really gets at the core MVV (mission, vision, values) of EGSA and show how committed it is to providing information, sharing information, and at the same time networking within the on-site power generator market.

"I see great potential in future classes that could go well beyond the Rowley school topics in the future."

EGSA Rowley School Instructor, Brian Ponstien - Sales Application Engineer, MTU Onsite Energy Corp.

Consider Yourself "In the Know" ...What is the Role of the EGSA "Second Timer"?

Being an Association with 50 years of history, EGSA has many labels...even for people! For example, when you attend an EGSA conference for the first time, EGSA Staff makes sure that you are labeled an EGSA First Timer, and if your company has recently joined EGSA, you may also receive the label of New Member too!

The reason that we single out First Timers is because we encourage our members to look for those ribbons and make themselves known to you. After all, we all know what it feels like to be the "new kid on the block." It can be exciting and nerve-wracking at the same time. We are an active group with lots of moving parts and we never want to overlook a new face in our midst!

Which brings us to a new label...in 2015, we engaged our Second Timers in earnest, and asked those returning to the very next conference to help us make our First Timers feel welcome! It worked successfully in both Jacksonville and Denver, so we have made the new label a fixture in our nomenclature for the immediate future and hope that you will take notice and help us in this membership goal!


In summary, both our 1st and 2nd Timers are important to the overall membership! Make yourself useful and help us engage and attract new blood into the organization. You will definitely be glad you did!



TAKE ADVANTAGE OF YOUR
**ELECTRICAL GENERATING
SYSTEMS ASSOCIATION**
LEARNING PARTNER
10% TUITION DISCOUNT
TUITION DISCOUNT




**COLUMBIA
SOUTHERN
UNIVERSITY**



**EXCLUSIVE
SCHOLARSHIPS**



**TEXTBOOKS
INCLUDED**



WHY CSU?
At Columbia Southern University, technology brings the classroom to you and our online degree programs give you the freedom to pursue your dreams, on your own terms, at your own pace, while studying anywhere you choose.

CSU OFFERS:

- Complimentary Evaluation of Prior Academic Credits
- Textbooks at No Cost
- Flexible Learning
- Math & Writing Assistance
- No Application Fee
- Flexible Start Dates
- No ACT, SAT, GRE, GMAT Required
- Multiple Course Schedule Options
- Career Services Available

FLEXIBLE. AFFORDABLE. ONLINE.
ColumbiaSouthern.edu/Partners

To learn more about our **ONLINE DEGREE PROGRAMS**, contact your representative today!
Christie.Ball@ColumbiaSouthern.edu | 800.344.5021

Gainful employment information available at ColumbiaSouthern.edu/Disclosure



Outstanding Solutions

Innovative information displays for Off-Highway applications.



MultiViu™ Flex

Easy-to-integrate CAN-based TFT Display (7" or 4") and Controller platform with options and models to suit your needs.



Centrobase 400

Centrobase instrument clusters provide an affordable, off-the-shelf CAN-based solution for integrated information display.



CANcockpit

A flexible, CAN-based system, processing data from analog and digital sensors and displaying via a master / satellite instrument architecture.



Viewline

Our most advanced and versatile analog instruments ever for power generation applications.

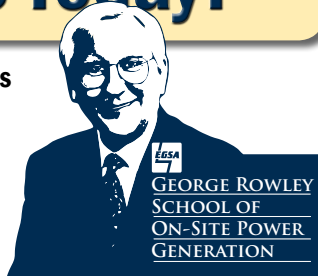
For more info, call 800-564-5066 or e-mail: salesupport-us@vdo.com

Enroll In One of Our EGSA Rowley Schools Today!

Join the Ranks of Professionals Who Understand the Power Generation Industry.

A key component of growing professionally is to keep rising to new challenges and opportunities. Electrical Generating Systems Association (EGSA) offers a rigorous, two-tiered education program that outlines the technical aspects of power generation.

Select your education experience and get the most out of your professional development dollar by attending one of our schools in 2016.



Basic Schools

Scottsdale, AZ Feb. 9-11
 Charlotte, NC Jun. 7-9
 Sterling, VA Aug. 16-18
 Orlando, FL Dec. 12-14

Advanced Schools

Austin, TX Apr. 4-7
 New Orleans, LA July 11-14
 Nashville, TN (Brentwood) Oct. 17-20



Electrical Generating Systems Association
 (561) 750-5575 • e-mail@EGSA.org • EGSA.org

ARE YOU AN ARMED SERVICES VETERAN IN THE POWER GENERATION INDUSTRY?

Would you like to learn more about the world of onsite power through formal education?

The objective of the EGSA Raymond G. Russell Education Grant for Veterans is to support our Nation's armed services veterans as they return from service, offer education in our industry and at the same time the opportunity to become engaged with our organization.

These annual grants are designed to provide qualified individuals with a full ride on all costs associated with the EGSA George Rowley School of On-Site Power Generation (Basic or Advanced). Travel expenses that meet our travel policy are also included. The goal is to provide additional education, through attendance at a Rowley School, and improve the veteran's skill set to make them a more attractive candidate for hiring.



Eligibility requirements and submittal materials can be found at www.EGSA.org

Application Deadline: JULY 1, 2016

Reserve a Booth in the 2016 EGSA Power Pavilion



December 13-15, 2016

Orange County Convention Center (North/South Hall), Orlando, FL

The world's biggest show for power generation, this show attracts more than 18,000 attendees from 76 countries and features 1,200 exhibitors.

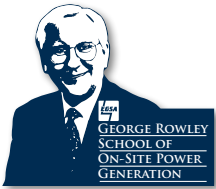
EGSA'S ON-SITE POWER PAVILION - a "show within a show" - provides EGSA Member firms with a unique opportunity to showcase their products within a defined area on the POWER-GEN International show floor. By grouping displays of firms that make, sell, and distribute On-Site Power Generation equipment, products and services, it raises awareness of On-Site Power's place within the larger context of the overall electrical power generation industry. You will know you are in the EGSA Pavilion when you walk in the red carpeted aisles.

Don't miss out, there's still time!

For more information and booth availability please contact EGSA headquarters at (561) 750-5575.



EGSA Provides Education & Certification Benefits!



THE GEORGE ROWLEY SCHOOLS OF ON-SITE POWER GENERATION

One of the key components of growing professionally is to keep rising to new challenges and opportunities. Keep your skills sharp by participating in our educational programs and stay abreast of technologies that support the Power-Generation Industry! EGSA offers a rigorous, two-tiered educational program, with schools throughout the U.S. that outline the technical aspects of power generation.

Perfect for staff new to the industry or someone who needs a refresher course, our Basic School is appropriate for anyone who needs a foundation in generator technology (sales, marketing, parts, service, even administrative staff). With our Advanced School, expect our highly skilled and knowledgeable instructors to go into great detail on subjects like paralleling, speed, load control, generator protection and voltage regulation and more. Need more information? Visit our website to see what offerings we have for this calendar year!

Continuing Education Unit (CEU) Program

After attending one of our On-Site Power School classes, demonstrate what you have learned with Continuing Education Units! CEUs are awarded after you attend one of our schools.

TECHNICIAN CERTIFICATION

Generator technicians vary in skill level from employer to employer and market to market. Finding a way to identify a proficient and knowledgeable technician, or even identifying a technician's skill level can be challenging.

The EGSA Technician Certification Program has expanded to meet these challenges! We now offer 2 levels of Certification.

Apprentice Level *(certification valid for 3 years)*

The Apprentice level exam provides technical college students, recent graduates, military personnel and other 1st or 2nd-year technicians with proof that the basic skill set has been met.



Journeyman Level *(certification valid for 5 years)*

Our Journeyman exam assures an employer that this technician meets or exceeds 3 years of practical field experience. It tests in 61 individual areas of expertise and was upgraded in 2014 to reflect current technology.



Membership in EGSA guarantees that for under \$200, generator technicians can achieve the industry standard. The benefits are immeasurable! Visit our website for additional detail on the program.



egsa.org



Electrical Generating Systems Association
(561) 750-5575 • e-mail@EGSA.org • EGSA.org



**We Design
We Build
We Deliver**

Smart Power Solutions since 1973



TRANSFER SWITCHES | SWITCHGEAR | LOADBANKS

REGAL

www.thomsonps.com 1.888.888.0110

Thomson Power Systems
Quality • Reliability • Commitment

Global Coverage Of The Power Generation Markets
Industry News . . . From Kilowatts To Megawatts

Print

or Digital

Online or Newsletters

Your Choice — We Deliver **Subscribe At www.dieselpub.com**

DIESEL PROGRESS
PRODUCTS • TECHNOLOGY • INDUSTRY NEWS

dpi DIESEL PROGRESS INTERNATIONAL
GLOBAL • PRODUCTS • TECHNOLOGY • INDUSTRY NEWS

Diesel & Gas Turbine WORLDWIDE
the prime mover magazine since 1962

Diesel & Gas Turbine Sourcing Guide



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	
PLEASE SELECT ASSOCIATE MEMBERSHIP CATEGORY	Associate Membership Categories - Select One					
	<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 _____
 Address _____
 City _____ State/Province _____
 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)**	\$ 55.00**
On-Site Power Reference Book (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=End-User AE=Service AG=Educational Institution AM=Military AR=Retiree AF=Student

AMOT MF
 Houston, TX
 Brant Stewart, Sales Manager
 AMOT works with original equipment manufacturers and oil and gas companies to design and develop safety products and solutions for engines, compressors, turbines, and other rotating equipment. Our product families include valves, electric and pneumatic instrumentation and control/condition monitoring systems.

Carolina Heating Service of Greenville, Inc. . . . CI
 Piedmont, SC
 Connie Caldwell, General Manager
 Generac generator residential, commercial and industrial sales, service and installation.

Contreras, Henry AF
 Canton, MA

Delvecchio, Matthew AF
 Rockland, MA

Echo Incorporated MF
 Lake Zurich, IL
 Hiroshi Horiuchi, Vice President
 We manufacture mobile generators from 11 kVA - 150 kVA in Japan. Echo is handling the sales and services of Shindaiwa generator through authorized dealers.

Engineered Control Works PLLC AC
 Cedar Rapids, IA
 Ralph McDowell, PE, Sole Member
 Design, fabricate, and install custom control panels. Update and renovate existing controls and switchgear.

Figueroa, Samuel AM
 Oveido, FL

Fuel Tank Maintenance Co LLC AE
 Cookeville, TN
 Jerry Hahn Jr., International Marketing/Contract Manager
 Fuel filtration, tank and pipe cleaning, inspection and repair, internal and external blasting and lining. Specializing in extreme confined space, heights and security and paperwork intensive projects.

Hinko, Anthony AF
 Middleboro, MA

Hunt, Colin AF
 Lakeville, MA

Martin Energy Group Services LLC MF
 Latham, MO
 Marcus Martin, CEO
 Martin Energy Group Services LLC sells, installs and services all types of generation plants and equipment. MEGS is focused on combined heat and power, renewables and grid connection equipment.

Peaker Services Inc. DD
 Brighton, MI
 Dave Philips, Sales Manager
 Peaker is a Woodward channel partner. We sell, distribute, install and service Woodward controls

Smith, Joshua AM
 Fairchild AFB, WA

Sommers Motor Generator Sales Ltd. DD
 Tavistock, ON Canada
 Chris McGregor, President
 Sommers Motor Generator Sales Ltd. has been a leading distributor and servicer of high quality generator systems since 1936. For over 80 years we have continually grown our company by providing reliable, brand name products and superior customer service.

Superior Industrial Sales & Service, Inc. DD
 Jackson, MI
 Corey Vincent, Sales
 Sales and service of generator systems. Dealer for Kohler, Briggs and Stratton, General Electric, Gillette, Winco and Onan.

University of Virginia AD
 Charlottesville, VA
 Charles Thomas, Emergency Power Systems Supervisor
 Provide maintenance and service to the University's 140 generators, ats and ups equipment. We are considering establishing a micro-grid.

Yanan USA MF
 Oakdale, CA
 Kirk Swanson, President
 Yanan makes alternators and gensets.



Power-Tronics, Inc.

Electrical Power Control Systems




- Universal Replacement AC Voltage Regulating Systems
- Electronic Static Exciters From 30 to 600ADC
- Custom DC Voltage Regulators
- Expert Troubleshooting and Technical Assistance
- Custom Control Products on Request
- Engineering Assistance
- Installation and After Sale Support
- Same Day or Overnight Delivery Available



**Give us a call and find out
 how we can help you.
 830.895.4700**

www.power-tronics.com

Manufacturing Voltage Regulating Systems for the International Electrical Generator Service and Repair Industry since 1989.







GEN-TECH, INC.

Another in Our Series of EGSA Member Company Profiles

GEN-TECH, INC.

www.gen-tech.net

Gen-Tech is a full service company specializing as a single source for generator and air systems Services, Rental, Parts, Sales, Commissioning, Testing and Training. Our specialized teams of Sales, Service and Rental personnel understand the impact a power or air loss can have in business. Gen-Tech is a full service company, a business partner 24/7 to our customers.

Through over 25 years, Arizona Generator Technology, Inc., dba GEN-TECH, has seen it all. Born in June of 1990, the company began with Bob and Peggy Piske, and his mentor Terry K. With a used 1987 F250, the company started with Bob performing the labor of a technician, Peggy handling the business, and Terry handling the sales. Over time, GEN-TECH has grown to cover Arizona and southern Nevada with three facilities and in 2014 began an air power division. GEN-TECH has 54 service vehicles and 90 dedicated employees to continue growth in every area of power and air.

In 1977, Bob started out as a maintenance engineer on the night shift for three high rise buildings, while during the day attending a refrigeration school. This led to a new career in heavy equipment at a local tractor dealership. As heavy equipment evolved with refrigeration so did the electromechanical / electrohydraulic controls. These new skills would lead to his career and a passion in power generation. Peggy came from a family who had been in business for over 46 years in Phoenix. Working alongside her parents, she gained the knowledge of business operations, sales, service, parts and accounting. Together their experiences built a desire to build / expand Arizona Generator Technology, Inc. A husband and wife team is unique in the business world, but it's that foundation of teamwork that's the strength of GEN-TECH.

Whether it is equipment to meet unique power challenges or unique service strength, GEN TECH has you covered. They also proudly support EGSA with 10 EGSA-certified technicians in-house.

By 1997, the current shop of 4,000 square feet no longer supported the expanding business. They made the decision to build their own facility designed to fit company culture of **Complete Customer Support**. In 2000, they moved into their current



Changes in the Desert Landscape? The GEN-TECH Brand expanded in 2014 to include air service and sales among their product offerings.



The gang's all here! The employees of GEN-TECH know that there is a lot riding on their service.

18,000 square foot facility with a full shop, offices, and training area. They maintain a fleet of rental generators and air compressors to meet customer demands. With 200 mobile generators and air compressors, from 20kW to 2MW power modules, electrical distribution, transformers, and load banks that range up to 2MW resistive reactive, GEN-TECH provides support and services on all levels.

In 1996, they opened their Las Vegas store. The company rapidly outgrew it and by 2010 moved into a facility with similar capabilities as the Glendale store. Las Vegas has twenty employees, three service bays, a rental yard with mobile generators, mobile air power and a training facility for customers that find a need to get away from the desert heat of their Glendale training classes. The Tucson branch was a strategic purchase to support their southern most customers in Arizona. They fully expect to outgrow this location in a couple more years. All three stores work together to provide complete coverage of Arizona and Southern Nevada, with the Glendale building serving as a hub.

As the company grew, so did their reputation of knowledge in complex systems. In the early nineties, a customer requested service to perform start up on a two engine paralleling system for a large hotel in downtown San Pedro Sula, Honduras. Bob was requested as the technician and upon arrival quickly noticed that there were candles throughout his hotel room. Having never been to Honduras, it appeared that this was a very lovey-dovey city. A question to the front desk about the romantic state of the hotel revealed that there was not enough power for the entire country. So only half of this large city could receive power at a time, in six hour increments. Therefore, any guest would have to use the candles for light. With all the candles and no fire sprinkler system, all Bob could wonder was how far of a jump from the sixth floor it was to the swimming pool. This type of experience demonstrates just how important having power is to the world in so many ways.

Having a rental fleet has always been part of their menu of services. For example, a prominent university theater was hosting nine shows of a Broadway play. Just twelve hours before show time, the ground outside the building collapsed. This shift in the earth caused the electrical concrete-encased pipes and medium voltage cables to shear, bringing out the fire department in the early morning. GEN-TECH responded and was able to assemble its 2MW generator and 2500 KVA transformer to the jobsite within hours. By the afternoon, medium voltage

cables had been run to the electrical vault in the basement, and power was restored to the building with a couple hours to spare before curtain time. The university was so appreciative that they provided front row seats for the technician and his wife to the Broadway play. It is these experiences that make technicians one of the most well rounded “first responders” in our industry.

Taking care of the customers is the absolute first priority. As Bob would say, “it is a lot easier to acquire a new customer than get an old one back.” From scheduling all technicians on standby for customer power systems during the Y2K problem to supervising a rental generator during a premier of a Broadway play, keeping customer commitments is number one. GEN-TECH does it all. “If it turns a shaft and makes power, we can work on it. There are no stops at connection points in the system regardless of make, model, and size,” Bob elaborates.

The EGSA Connection

Arizona Generator Technology, Inc. has been an EGSA Member since 2003. By being a member of EGSA, GEN-TECH is able to network with other generator companies and be involved in the industry.

To share knowledge and experiences with others, EGSA allows GEN-TECH a place to give back to the industry. GEN-TECH is proud to be a “DD” and equally proud to have been a participant in the creation of the Technician Journeyman certification, the apprentice certification, and the TOYA (Technician of the Year Award). All are examples of participating in membership, working alongside others with their same principles, to help build upon and bring forth the betterment of the industry by being an EGSA Member. As the power generation industry grows, so will GEN-TECH. ■



If it's rental gensets you need, Gen-Tech has the size that's "just right!"

With more than 25,000 square ft between their 2 locations, the GEN-TECH team aims to serve all your power needs in Arizona and Nevada.

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 Mid-Atlantic

Power Generator Field Service Technician Engines Inc

Location: Eastern PA, NJ, DE

Seeking experienced generator and transfer switch field service technician. Diagnose, troubleshoot, repair and service diesel and gas power systems and related accessories. Prefer applicant to be certified by Kohler or Cummins/Onan with a minimum of 3 yrs field service experience.

To apply: john@enginesinc.com

USA Northeast

Residential Generator Sales Manager Cooper Electric Power Systems

Location: Ocean, NJ

We seek a career-oriented individual with superior sales leadership, technical and organizational skills. You will be responsible for working with the Residential Sales Team, Cooper Electric Supply Company Branches & Dealer Network, and will be responsible for P&L for the Residential Department. We require 3 years experience, preferably with Kohler generators.

EGSA Certified Technicians Preferred.

To apply: Email to geri.weinberg@sonepar-us.com

Application Deadline: 2016-06-18

Power Generator Service Operations Manager

Cooper Electric Power Systems

Location: Ocean, NJ

Provides leadership, directs and coordinates all activities in the service area. Promotes the service department to customers to increase service sales, productivity, labor utilization, work in process, invoice preview queue, timely invoicing, service inventory, warranty recovery and expense control. 3-5 years experience & training with diesel engines, power generation.

EGSA Certified Technicians Preferred.

To apply: geri.weinberg@sonepar-us.com

Application Deadline: 2016-06-18

Aftermarket Sales - USA North East

Kinsley Power Systems

Location: Northeast

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. The position is a hybrid of outside sales, technical sales, account management and customer service.

To apply: lbarnes@Kinsley-group.com

USA Southeast

Switchgear System Service Manager

Nixon Power Services

Location: Atlanta, GA, Nashville, TN or Charlotte, NC
Responsible for establishing, developing and growing the new Switchgear Systems Service Business Unit. Initially responsible for securing and executing switchgear service business in this space. As the unit matures, potentially become responsible for growth, training, sales and operations of the business unit. Organize and optimize switchgear systems preventive maintenance services.

To apply: Email a your resume to resume@nixonpower.com or apply through www.nixonpower.com

Aftermarket Service Manager

Nixon Power Services

Location: Nashville, TN

This position is responsible for Service department's financial performance; departmental operations; warranty administration and execution. Recruit, train and manage service personnel; lead the branch safety program; optimize preventive maintenance; develop, implement and maintain consistent department productivity processes and procedures; ability to lead and mentor people. Effective, professional verbal communication skills.

To apply: Submit an application on our website at www.nixonpower.com or email your resume to resume@nixonpower.com.

Aftermarket Service Manager

Nixon Power Services

Location: Atlanta, GA

This position is responsible for Service department's financial performance; departmental operations; warranty administration and execution. Recruit, train and manage service personnel; lead the branch safety program; optimize preventive maintenance; develop, implement and maintain consistent department productivity processes and procedures; ability to lead and mentor people. Effective, professional verbal communication skills.

To apply: Submit an application on our website at www.nixonpower.com or email your resume to resume@nixonpower.com.

Field Service Technician

Nixon Power Services

Location: Maryland

This technician possesses a high level of knowledge, dedication and work ethic required to quickly learn the GE Jenbacher engine driven generator systems, repairs and operations; that allows them to perform major repairs, overhauls and installations of engines, generators and associated equipment. Travel 75% - 90%. Mechanical troubleshooting. Electrical troubleshooting.

To apply: Submit an application on our website at www.nixonpower.com or email your resume to resume@nixonpower.com.

Field Service Technician

Nixon Power Services

Location: North or South Carolina

This technician possesses a high level of knowledge, dedication and work ethic required to quickly learn the GE Jenbacher engine driven generator systems, repairs and operations; that allows them to perform major repairs, overhauls and installations of engines, generators and associated equipment. Travel 75% - 90%. Mechanical troubleshooting. Electrical troubleshooting.

To apply: Submit an application on our website at www.nixonpower.com or email your resume to resume@nixonpower.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)

EGSA Industry News Guidelines

We welcome you to submit press releases for consideration for inclusion in the Industry News section of *Powerline Magazine*. However, due to the fact that *Powerline* is the voice of an organization consisting of more than 800 Member companies, we maintain a strict editorial policy that prohibits any endorsement of a particular company or product. As a result, **we do not accept product-specific or service-specific releases for publication.**

Please email your press releases to PR@EGSA.org.

PowerSecure Hires Andrew Boone

Andrew Boone has joined PowerSecure in the challenging new role of Plant Manager of their Powerfab Division. With 17 years in On-Site Power, Andrew understands all of the roles in the custom packaging business. He looks to use that knowledge and experience to help improve an already impressive lineup of products from mobile gen-set packages to their PowerBlock generation systems.



Andrew began his career as a Fabricator (with Robinson Custom Enclosures), where he learned about the Packaging and On-Site Power industries. He held several positions there, first as a fabricator, a Leadman (building the enclosures, fuel tanks, and others items associated with Power Generation equipment) and from there, he was promoted to the Design Manager, where he played a vital role to help mesh shop production and working alongside engineers and drafters on design and sound attenuation. After 6 years, he was promoted to Estimating Manager, where he used his design background to help customers develop customized cost-effective solutions for many demanding requirements.

As an active member of EGSA, we wish Andrew great success in this position.

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

Gary Sparks Joins Enclosure Manufacturer, CMCO, in Chillicothe, IL

Gary Sparks, an Illinois native, has joined the Sales Team of Chillicothe Metal Company (CMCO), an industry leader in the power generation packaging industry. Gary brings 7 years of on-site power experience to the position. His primary responsibilities will be pre-engineering, meeting CMCO's customer quoting requirements, communication and project management. In his spare time, Gary is a volunteer fire fighter. He is also married with 3 young children.



Please visit cmcousa.com for more information. ■

Industry Veteran Lanny Slater Accepts Position with EGSA Member Firm, GEN-TECH

Lanny Slater, formerly of GFS Corp. and Karl Dungs, has joined EGSA Member firm, GEN-TECH as their new Sales Operations Manager at the company headquarters in Glendale, AZ.



With GEN-TECH expanding its customer offering, Slater's depth in Sales Leadership and Gas Compression makes him the ideal candidate for the position. "Lanny's expertise is a great fit to the challenges facing our future growth," says Bob Piske, President.

Please visit gentechusa.com for more information. ■

Tramont Expands Internationally with Major Sale for Telecom Project

Tramont Manufacturing LLC has expanded its reach into international markets with the sale of 75 sub base tank and enclosure packages to Cummins for a telecommunications project in South America. The packages, which house Cummins generator sets, include a 1000-liter sub base fuel tank and a steel, weather protected enclosure.

The packages are being utilized at cellular sites throughout Chile. All units were shipped from Tramont's production facility between November 2015 and January 2016 and were successfully installed.

Bernardo Bandeira, Cummins Accessories Sales Manager for South America and Vijay Raichura, Tramont Executive Vice President, spearheaded the project and worked closely to meet requirements, including having just 90 days from the request for proposal to design, produce and ship the packages.

Bandeira said that Tramont Manufacturing was selected to supply the packages, "because of their close relationship with Cummins. They stepped up to the challenge promising to provide not only a good quality product, but executing on a short timeline. Tramont's flexibility was the key to our success, by providing both a quality product and a surprisingly quick turnaround."

Raichura also pointed out that "another important factor was our ability to work closely with our customer's sales, marketing and engineering teams to design a product that meets their needs."

Raichura noted that the sale marks Tramont Manufacturing's entry into the international telecommunications market, an important milestone for the company.

"While Tramont products can be found all over the world, our focus in the past has been North America," said Raichura. "While we look for continued growth in our traditional markets, we also are actively pursuing more international opportunities."

Please visit www.tramont.com for more information. ■

The union of ASCO, Avtron and Froment.



The global leader in load banks.

We've put all the pieces together.

The proven, market-leading load bank technologies of Avtron and Froment are a perfect fit with ASCO Power Technologies. Combining world-class innovation and more than 200 years total experience, ASCO is your one-stop partner that offers complete solutions that you can rely on to solve any power testing requirement.

Broadest Portfolio

No company in the world can match the depth and breadth of our portfolio. From simple 10 kW portable load banks to multiple MVA, we can provide a solution for virtually any application. We revolve around your needs, with the expertise and technical knowhow to assemble custom solutions that provide leading power test solutions.

Technology

Innovation is at our core, complemented by our commitment to build load banks to the highest standards – ISO9001, UL/CUL, CSA, CE, IEC, NFPA. Technical leadership includes Sigma control which is sector leading in simplicity, ease of use, and accuracy.

Sigma brings cost effective solutions to today's power testing requirements which can require high level instrumentation, data capture and verification with the ability to link multiple load banks of differing capacities or combination and controlled from one hand-held terminal or PC.



Experience

Ninety years combined experience in load banks is only matched by the 125 years ASCO has been providing power solutions. Our team of experts has provided countless standard and custom load banks to the industry over the years.

ASCO®

www.emersonnetworkpower.com/loadbank • (800) 800-ASCO
ascoapu.com • customercare@asco.com

Emerson and ASCO are trademarks of Emerson Electric Co. or one of its affiliated companies.
©2015 Emerson Electric Co. ASCO Power Technologies


EMERSON
Network Power