



On behalf of:

The **Delaware Valley Power Quality Group**, established in 1993, is a volunteer not-for-profit organization dedicated to providing a state of the art educational forum for the exchange of information pertaining to Power Quality issues and the most technically up to date products and practices.



#### Directions

The Shady Maple Smorgasbord, featured in the Philadelphia Inquirer, is located at 129 Toddy Lane, East Earl, PA. Take the PA Turnpike to Exit 298 (old Morgantown Exit 22). From the Turnpike, follow the Morgantown exit to 2<sup>nd</sup> traffic light then take Route 23 West (becomes Main St.) for approximately 10 miles to Route 897 to Toddy Lane.

You are cordially invited to the  
Quarterly Meeting of the  
**Delaware Valley Power Quality Group**

to be held from 10:00 AM to 3:00 PM on  
**Wednesday, December 3<sup>rd</sup>, 2014** at

**Shady Maple Smorgasbord**  
**129 Toddy Lane**  
**East Earl, PA 17519**

Meeting Agenda:

**Introduction to Power System Protection and  
Cyber Security Using Multifunction Digital Relays**

Main Speaker:

**Harold Fischer, P.E.**  
**Robinson Sales, Inc., Sales Engineer on behalf of  
Schweitzer Engineering Laboratories**

**IT'S TIME TO RENEW YOUR DVPOG**  
**MEMBERSHIP FOR 2015. 3 YEAR**  
**RENEWAL IS THE BEST VALUE!**

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# Introduction to Power System Protection and Cyber Security Using Multifunction Digital Relays

## ***Program Description:***

*Schweitzer Engineering Laboratories (SEL) will present a four part discussion of modern protection for Medium and High Voltage Power Systems including the following:*

- *Protection of power systems using modern three phase, microprocessor based relays*
- *Security against Cyber attacks for modern relays using digital communications*
- *Event Log and Event Analysis for fault analysis and event reconstruction*
- *Metering using Digital relays*

## **Speaker: Harold Fischer, P.E., Robinson Sales, Inc., Manufacturers Representative for Schweitzer Engineering Laboratories (SEL)**

Harold Fischer, PE joined Robinson Sales, Inc. as a Sales Engineer in May of 2010. Harold began his career at PPL Electric Utilities as a Substation Engineer. He was responsible for the detailed engineering, design, and installation of electrical substation apparatus. Harold has experience working on various distribution and transmission systems at voltage levels ranging from 12kV through 500kV. He was also responsible for the engineering, design, and installation of the protection and control system for PPL's distribution and transmission system. Harold was then promoted to Supervising Engineer in the Relay Test department where he supervised the commissioning, testing, and maintenance of protection and control systems. Concurrently, Harold was the Technical Project Manager where he responsible for the development of PPL's Next Generation Substation design. In 2007, Harold was promoted to the Manager of Relay Test where he supervised a group of fifty (50) Relay Test Engineers and Technicians. He was responsible for commissioning, testing, and maintenance of protection and control schemes for distribution and substation applications, and to ensure compliance with respect to various NERC, RFC, and MAAC testing standards. More recently, Harold developed optimized maintenance programs and capital replacement strategies for PPL's substation and distribution assets. Prior to PPL, Harold's work experience included the design of power distribution, lighting, and instrument wiring systems for power plant and petrochemical facilities. Harold earned his BSEE from Lafayette College and is a registered Professional Engineer in the Commonwealth of Pennsylvania.

### **Meeting Information:**

**Place: Shady Maple Smorgasbord  
129 Toddy Lane  
East Earl, PA 17519 (new facility  
is just off Rt. 23 and Rt. 897)**

**Date: Wed., December 3<sup>rd</sup>, 2014  
Time: 10:00 AM to 3:00 PM**

**Lunch Will Be Provided  
Please RSVP by Fri., Nov. 28<sup>th</sup>, 2014**

### **REGISTRATION:**

**NAME:**

**COMPANY:**

**ADDRESS:**

**City:**

**State:**

**Zip:**

**PHONE: (     )**

**(include area code)**

**FAX:**

**E-Mail:**

**Category:**  Academic  Contractor  Utility  
 Consultant  Manufacturer (Rep)  End User

**Registration Fee:** Check or Cash only  
To become a 2015 member of the DVPQG and receive notification of all future meetings, training, and events, please select the appropriate option. Yearly membership runs from January 1 to December 31 of each year.

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|-----------------------------|---|-----------------|
| 1. <input type="checkbox"/> | <b>Meeting – DVPQG Member</b>           | <b>\$ 50.00</b> |
| 2. <input type="checkbox"/> | <b>Meeting – Non-Member</b>             | <b>\$ 70.00</b> |
| 3. <input type="checkbox"/> | <b>Mtg. &amp; 2015 Membership</b>       | <b>\$ 75.00</b> |
| 4. <input type="checkbox"/> | <b>Meeting &amp; (3) yr. Membership</b> | <b>\$110.00</b> |
| 5. <input type="checkbox"/> | <b>2015-2017 Membership (3 yr.)</b>     | <b>\$ 75.00</b> |

**SEATING IS LIMITED!** Please pre-register...Registration at the door is **\$5.00** extra. (Cancellation and Refund: To cancel your registration and receive a full refund, you must contact DVPQG (i.e. email: treasurer@dvpqg.org or call 717.252.4730) at least 24 hours prior to the meeting. Otherwise, no refunds will be issued.)

**Please mail this registration form and a check, made out to "Delaware Valley Power Quality Group, Inc.", for the appropriate registration to:**

Delaware Valley Power Quality Group, Inc.  
5410 Mt. Pisgah Rd.  
York, PA 17406

**Please respond by Fri., November 28<sup>th</sup>, 2014**  
**Please be complete in filling out registration.**

You may also pre-register by E-mail to [registrations@dvpqg.org](mailto:registrations@dvpqg.org) and then mail your payment.