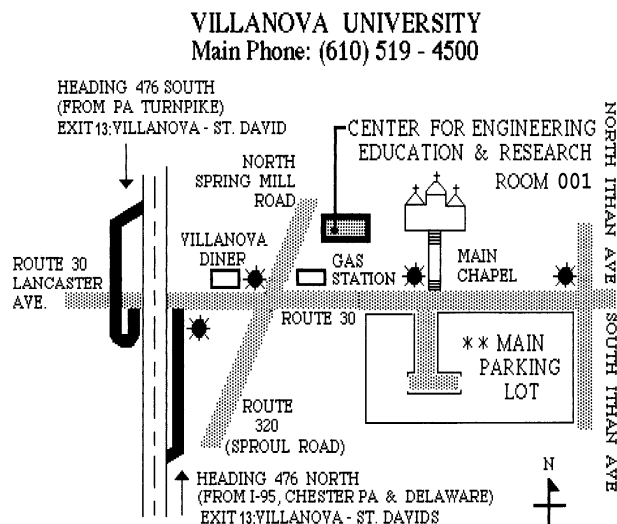




The **Delaware Valley Power Quality Group**, established in 1993, is a volunteer not-for-profit organization dedicated to providing a state of the art educational forum for the exchange of information pertaining to Power Quality issues and the most technically up to date products and practices.

Directions and map



** PARK IN MAIN LOT.
 PUT A SIGN INSIDE YOUR CAR ON THE FRONT WINDSHIELD. IT SHOULD READ:

ONE-DAY VISITOR
 ATTENDING SEMINAR AT CEER BLDG
 (CAMPUS CONTACT: PROF. MERCEDE)

On behalf of:

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, March 9, 2005 at

**Center for Engineering Education & Research
 Room 001
 Villanova University
 Villanova, PA**

Meeting Agenda:

Arc Flash Hazard Awareness and Protection

Main Speaker:

**Alton W. Baum, P.E.
 Square D/Schneider Electric**

**IT'S TIME TO RENEW YOUR
 DVPQG MEMBERSHIP FOR 2005. 3
 YEAR RENEWAL IS THE BEST
 VALUE!**



Arc Flash Hazard Awareness and Protection

Program Summary:

Since 2000, with the update of NFPA-70E "Standard for Electrical Safety in the Workplace", industrial and commercial power facilities have been given a new set of guidelines and tools to aid the protection of their electrical workers. These include updated standards for safety-related work practices and power systems analyses, as well as newly designed personal protective equipment (PPE). This presentation will take you through the maze of questions that the new standards pose on our industry. It begins with introductory information on arc flash and incident energy; moves through the required documents, including National Electrical Code requirements on labeling; and continues through the Flash Hazard Analysis including detailed calculations. Comparisons between Hazard/Risk Categories listed in Table 130.7 of 70E and IEEE-1584 calculation methods will be discussed, as well as practical mitigation techniques for high incident energy levels. A discussion on Arc Flash hazards associated with connecting power quality monitors will be facilitated as well as description (and showing) of the different levels of PPE.

- Introduction to Arc Flash and Incident Energy
- Standards involved (NFPA-70E, IEEE-1584, NEC-2005)
- What changed and why
- Flash Hazard Analysis including calculating Flash Hazard Boundary
- Labeling
- Incident Energy Mitigation Techniques
- Comparisons between circuit breakers and fuses for incident energy
- Applications to PQ monitoring
- Description of PPE

Speaker: Alton W. Baum, P.E.

Engineering Services Regional Manager
Square D / Schneider Electric

Mr. Baum carries over 17 years of industrial power systems and utility generation experience. His career began with Westinghouse Power Generation Service as an Electrical Field Service Engineer working power plant outages on large generator and excitation equipment. Later, he moved to the Westinghouse Power Systems Engineering group where he performed power system studies in the industrial, commercial and municipal environments. These studies included short circuit, device coordination, load flow, power factor correction, transient motor starting, power quality and harmonic analyses. After helping startup Cutler-Hammer's new engineering service group in 1998, Mr. Baum moved to Square D Engineering Services as a Senior Power Consulting Engineer catering to the pharmaceutical industry. Since 2002, Mr. Baum has been managing Square D's Engineering Service team with regional coverage in the eastern US. In this role, Mr. Baum has worked extensively in the area of Arc Flash analysis and incident energy mitigation. He and his team have performed numerous Flash Hazard Analyses for both the industrial and commercial markets, and regularly speak to technical groups about arc flash issues.

Mr. Baum holds the BS degree in Electrical Engineering from West Virginia Institute of Technology (1987), the Master of Business Administration from Widener University (1998), and the MSEE in Power Engineering from Drexel University (2003). He is a member of IEEE and registered as a Professional Engineer in Pennsylvania and West Virginia.

Meeting Information:

Place: Center for Engineering
Education & Research – Rm 001
Villanova University
Villanova, PA

Date: Wednesday, March 9, 2005
Time: 10:00 AM to 3:00 PM

Lunch Will Be Provided
Please respond by Fri., Mar. 4, 2005

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:

To become a 2005 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.

1. Meeting – DVPQG Member \$ 35.00
2. Meeting - Non-Member \$ 55.00
3. Mtg. & 2005 Membership \$ 60.00
4. Mtg. & (3) yr. Membership \$105.00
5. 2005 Membership Only \$ 30.00

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 717.560.2743) 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.
P.O. Box 511
East Petersburg, PA 17520-0511
www.dvpqg.org

Please respond by March 4, 2005

Please be complete in filling out registration.
You may also pre-register by E-mail to registrations@dvpqg.org
and then mail your payment.