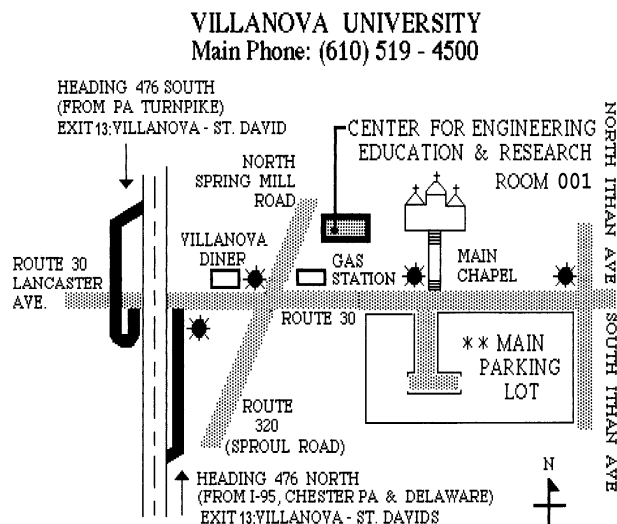




The **Delaware Valley Power Quality Group** is a volunteer not-for-profit organization dedicated to providing a state of the art educational forum for the exchange of information pertaining to Power Quality issues and the most technically up to date products and practices.

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 a.m. to 3:00 p.m. on  
Thursday, June 19th, 2003 at

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

Meeting Agenda:  
**Understanding and Solving Voltage Sag  
Problems**

Main Speaker:  
**David Mueller, P.E.  
Electrotek Concepts**

**IT'S TIME TO RENEW YOUR  
DVPQG MEMBERSHIP FOR  
2003. 3 YEAR RENEWAL IS  
THE BEST VALUE!**

## Understanding and Solving Voltage Sag Problems

**Speaker: David Mueller, P.E., Electrotek Concepts** – David Mueller manages the Power Quality Projects and Studies for Electrotek Concepts, Inc. based in Knoxville, Tennessee. Since 1990, he has worked on a wide variety of power system projects to study and solve power quality problems for industrial, commercial, and utility clients.

He worked from 1993-1995 in Nottingham, England, starting the Power Quality Services group for East Midlands Electricity. At that time he developed the 10-volume set, "Power Quality Training Manuals" for East Midlands Electricity. From 1998-2001, he has been assisting PowerGrid Ltd. in Singapore to develop power quality capabilities.

Dave has written dozens of technical papers and articles on power quality, and has given over hundreds of presentations on these topics. He has presented these subjects in over 70 different cities, and has worked in over 30 different states in the U.S. Overseas, he has presented power quality in England, Ireland, Spain, Holland, Columbia, the Czech Republic, Sweden, Bulgaria, Brazil, Indonesia, Malaysia, and Singapore.

Prior to joining Electrotek, Dave was employed for eight years by General Motors, working as a project engineer on a variety of facilities and automation controls projects. While working at GM he won a Corporate Energy Conservation Award.

Mr. Mueller is a registered P.E. He received a B.S.E.E. from the University of Cincinnati, and a Master of Engineering from the Electric Power Engineering Department at Rensselaer Polytechnic Institute.

### ***Program Summary:***

*Voltage sags (dips) are an important type of power quality disturbance that affect industrial and commercial equipment, costing industry billions of dollars. New technologies are available for solving voltage sags, but industry has been slow to adopt them. The talk will explain current trends in the industry, what the problems are, and suggest an economic methodology toward taking action to address these problems.*

*What is a voltage sag, where do they come from?*

*What are the characteristics of voltage sags?*

*How is equipment affected by voltage sags?*

*What are some of the new technologies for solving voltage sags?*

*Why is it hard to determine the economic impacts from voltage sags, and how should this be managed?*

### **Meeting Information:**

**Place: Center for Engineering  
Education and Research - Room 001  
Villanova University  
Villanova, PA**

**Date: Thursday, June 19<sup>th</sup>, 2003**

**Time: 10:00 a.m. to 3:00 p.m.**

**Lunch Will Be Provided**

**Please respond by Mon., June 16<sup>th</sup>, 2003**

### 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 2003 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. <input type="checkbox"/> | Meeting – DVPQG Member       | \$ 35.00 |
| 2. <input type="checkbox"/> | Meeting - Non-Member         | \$ 55.00 |
| 3. <input type="checkbox"/> | Mtg. & 2003 Membership       | \$ 60.00 |
| 4. <input type="checkbox"/> | Meeting & (3) yr. Membership | \$105.00 |
| 5. <input type="checkbox"/> | 2003 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 the DVPQG treasurer (i.e., email: treasurer@ dvpqg.org) 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

**Please respond by Mon., June 16, 2003**

**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.