



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.

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On behalf of:

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

to be held from 10:00 AM to 3:00 PM  
**Wednesday, October 7<sup>th</sup>, 2020**

***Video Conferencing***  
***INTERACTIVE WEBINAR***

Meeting Agenda:

**POWER TRANSFORMER  
SELECTION AND TESTING**

Speaker:

**Sheldon P. Kennedy, PE**  
**Niagara Transformer Corp.**

**SPECIAL ONE TIME FREE**

**SEMINAR FOR THE BENEFIT OF**

**OUR MEMBERS AND GUESTS**

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# POWER TRANSFORMER SELECTION AND TESTING

(Fillable PDF form may be completed, saved as, and e-mailed.)

## Program Description:

- **Factory Testing:** A review of all standard factory acceptance tests (FAT) of liquid filled power transformers will be presented. Both routine tests and design tests will be presented. Overviews of the tests, why the tests are conducted, and expected results will be presented.
- **Transformer Selection:** A review of the pros and cons of dry type transformers, cast coil transformers and liquid filled transformers. A brief review of transformer liquid selections will be given. Standard liquid filled transformer accessories will be discussed. Standard types of on load tap changers will be presented.
- **Transformer Liquid Dissolved Gas Analysis (DGA):** A review of the gases generated in transformer liquids will be presented. Factors that cause liquid degradation and the Degree of Polymerization (DP) will be discussed. Sources of contamination will be presented. Corrosive sulfur issues will also be discussed. Analysis by Dorenberg, Rogers and Duvall triangle methods will be presented.

**Speaker: Sheldon P. Kennedy, PE, IEEE Life Fellow, Niagara Transformer Corp.**

Sheldon has 45 years of electrical engineering experience. He has been Vice President Engineering since 1988 with Niagara Transformer Corp., a small power and medium power liquid filled transformer manufacturer, as well as for special application transformers, including grounding transformers, motor drive transformers, rectifier transformers and furnace transformers. He was Engineering Manager at Niagara Transformer from 1985 to 1988. Prior to that he had been Chief Electrical Engineer at R.E.Uptegraff Manufacturing for four years. He has also been a Transmission Substation Engineer and Rate Engineer for four years with Allegheny Power. He is a Life Fellow Member of IEEE, elevated to this rank "for leadership in the technology and standards of rectifier, inverter and harmonic-mitigating transformers"; an IEEE Transformers Committee member, serving on many subcommittees, working groups, task forces, and as Chair of the Insulation Life Subcommittee; Chair of C57.32 Neutral Grounding Devices; past Chair of C57.52 Sealed Dry Type Transformers; and past and current Chair of C57.18.10 Rectifier Transformers. He has been Chairman of the NEMA Transformer Section and Chairman of Accredited Standards Committee C57-Transformers, Regulators and Reactors. He has authored several IEEE papers, a Doble conference paper, and the chapter on rectifier transformers in the CRC book, "Electric Power Transformer Engineering". He received a BSEE from the Pennsylvania State University and is a registered Professional Engineer.

## Interactive Webinar Meeting:

**Place: \* YOUR OFFICE OR HOME**

**\* ASK QUESTIONS**

**\* NETWORK DURING LUNCH & BREAKS**

**Date: Wednesday, October 7<sup>th</sup>, 2020**  
**Time: 10:00 AM to 3:00 PM**

**WebEx SEATING IS LIMITED**  
**Registration Deadline Fri., Oct. 2<sup>nd</sup>, 2020**

**Name:** \_\_\_\_\_

**Company:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City/State/Zip:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**E-Mail:** \_\_\_\_\_

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

**Registration Fee:** Free – Special One Time

To become a 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. 2021 year is included with 1-year payment.

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|-----------------------------|--|-----------------|
| 1. <input type="checkbox"/> | <b>Meeting – DVPQG Member</b>          | <b>\$ 0.00</b>  |
| 2. <input type="checkbox"/> | <b>Meeting – Non-Member</b>            | <b>\$ 0.00</b>  |
| 3. <input type="checkbox"/> | <b>2020/21 Membership (1 yr.)</b>      | <b>\$ 30.00</b> |
| 4. <input type="checkbox"/> | <b>2020/21-2023 Membership (3 yr.)</b> | <b>\$ 75.00</b> |
- ☐ Email receipt requested

**WebEx SEATING IS LIMITED!**  
**PRE-REGISTRATION IS REQUIRED**

***Log-in information will be e-mailed to registrants two days in advance for you to test your system.***

**Please complete and e-mail this registration form.**

**Membership check payable to "Delaware Valley Power Quality Group, Inc.":**

DVPQG Registrations  
225 N. 3<sup>rd</sup>. Street  
Emmaus, PA 18049-2713

**Registration Deadline Friday, October 2<sup>nd</sup>, 2020**  
You may also register by E-mail to [registrations@dvpqg.org](mailto:registrations@dvpqg.org)  
Mail your membership check to above address.

Attendees receive a Certificate of Completion for  
4.0 Hours!  
(Applicability and credit may vary between jurisdictions.)