

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.



Energy Storage

Directions

The Valley Forge Casino Resort is located at 1160 1st Avenue, King of Prussia, PA. From the North, take PA 422 S. From the Northeast and East, take I-276 W to I-76 W to Exit 327 to N. Gulph Rd. From the West, take I-76 E to Exit 327 to N. Gulph Rd. From the South, take I-76 W to Exit 327-328A-328B to Guthrie Blvd.

Visit www.vfcasino.com for more info.

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 Thursday, March 30th, 2017 at

Radisson Hotel - Valley Forge Casino Resort 1160 1st Avenue King of Prussia, PA 19406

Meeting Agenda:

Energy Storage

Speakers:

Patrick Shoop Customized Energy Solutions

> Jack Lyons NEMA

IT'S TIME TO RENEW YOUR DVPQG

MEMBERSHIP FOR 2017. 3 YEAR

RENEWAL IS THE BEST VALUE!



Energy Storage

Program Description:

- 1. Introduction to Energy Storage Patrick Shoop, Customized Energy Solutions
 - Overview of energy storage technologies
 - Applications for energy storage (at the grid scale and end-user level)
 - Key trends in the energy storage industry
 - Developments in energy storage markets and regulations
- 2. Codes and Products Jack Lyons, NEMA
 - Installation, maintenance and interactive operational requirement of Energy Storage Systems, ESS
 - NFPA 70 will be adopting the new Article 706, Energy Storage Systems and the new requirements of installation
 - Energy Storage Manufacturer's view of technologies and what safety requirements should be followed while installing, maintaining and operating each of these systems.

Patrick Shoop, Senior Consultant, Customized Energy Solutions

Patrick provides market intelligence and technical expertise on energy storage and other emerging energy technologies to clients. He also manages the production of regional reports on energy storage in each U.S. wholesale electricity market for the StorageIQ subscription service and serves as the lead consultant on energy storage in New York State. His background is diverse, covering technology monitoring, market assessment, and strategy consulting in energy and other technical industries. Patrick holds a Bachelor of Science in Engineering, Product Design from Stanford University's Mechanical Engineering Department.

Jack Lyons, Northeast Field Representative, NEMA

Jack held a Masters Electrical License in the Commonwealth of Massachusetts for over 35 years, has a Bachelor's degree in Occupational Education, Associates Degree in Engineering Science and held a certification as an OSHA Instructor for Construction and General Industry.

<u>Meeting Information:</u>

Place: Radisson Hotel - Valley Forge Casino Resort 1160 1st Avenue King of Prussia, PA 19406 Date: Thursday March 30th, 2017 Time: 10:00 AM to 3:00 PM

Lunch Will Be Provided
Please RSVP by Monday March 27, 2017

REGISTRATI	ON:	
NAME:		
COMPANY:		
ADDRESS:		
City:	State:	Zip:
PHONE: ()	
(include area code)		
FAX:		
E-Mail:		
Category:	Academic Contractor U	tility
☐ Consultant	☐ Manufacturer (Rep) ☐ End	User
To become a notification of please select	Fee: Check or Cash only 2017 member of the DVPQG all future meetings, training, the appropriate option. Yearl runs from January 1 to Decem	and events,
	ting – DVPQG Member	\$ 55.00 \$ 75.00
	ting – Non-Member & 2017 Membership	\$ 75.00 \$ 80.00
	ting & (3) yr. Membership	\$115.00

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 717.252.4730) at least 24 hours prior to the meeting. Otherwise, no refunds will be issued.)

\$ 30.00

\$ 75.00

2017 Membership (1 yr.)

2017-2019 Membership (3 vr.)

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 Mon. March 27th, 2017
Please be complete in filling out registration.

You may also pre-register by E-mail to registrations@dvpqg.org and then mail your payment.

Attendees receive Certificate of Completion for 4.0 Professional Development Hours!