



IEEE NCS IAS/PES Evening Talk

Minimizing Plant Interruption Caused by Line Disturbances Using Active Voltage Conditioners

Thursday, April 3rd, 2008, 6:00PM to 9:00PM at
[German Canadian Cultural Centre](#)

Voltage anomalies, in particular voltage sags, can cause equipment loss and process upset. It is reported that in North America alone, voltage sags cost industry over US\$200 billion per annum. Electrical utilities cannot readily prevent the occurrence of voltage sags, disturbances and momentary outages, which typically last for a fraction of a second. It is usually not practical for the utility to provide correction for their distribution system or even for an individual industrial customer as in most cases; these events are caused by inclement weather conditions. Industry, which regularly invest millions in production equipment, often ignore, or greatly underestimate, the cost of their unplanned outages. Traditionally, a UPS is used to provide adequate protection for data processing centers, but this solution is impractical and uneconomical for plant wide or larger critical electrical equipment distributed throughout the plant.

This presentation will cover the latest Active Voltage Conditioning solutions, which keep critical equipment running, avoid process upset and provide very attractive financial payback. It will also describe case studies covering installation for active voltage conditioners in Petro-Chemical and other industries for low voltage and medium voltage up to 36 KV. In addition, it will provide samples of actual field measurements of electrical power disturbances at various voltage levels.

Speakers:

Robert Hanna, PhD, P.Eng.

David Ezer

Robert A. Hanna received the B.Sc. degree from the University of Basra, Iraq in 1971, M.Sc. Degree (with Distinction) from Queen Mary College, University of London, England in 1973 and Ph. D. degree from Imperial College of Science and Technology, University of London, England in 1977, all in electrical engineering. Following a short teaching career, in 1981 he joined Petro Canada (formerly Gulf Canada) as a central engineering specialist providing technical support to the refineries in implementing capital projects and equipment selection. In 1995, he founded RPM Engineering Ltd., a certified consulting company in Ontario, Canada specializing in Adjustable Speed Drive applications, power quality studies, emergency shutdown equipment and equipment failure investigations.

<http://www.ewh.ieee.org/r7/northern-canada/ias-pes/>

Dr. Hanna is registered professional engineer in the provinces of Ontario, Alberta and British Columbia, Fellow of the Institute of Electrical and Electronics Engineers (FIEEE), a Fellow of the Institution of Electrical Engineers (FIEE), UK and a Fellow of the Engineering Institute of Canada (FEIC). He was President of IEEE Canada and IEEE Director (Region 7) for 2006-2007.

David Ezer received the B.Sc. degree, specializing in power electronics as part of an electrical engineering degree, from the University of Cape Town, Cape Town, South Africa, in 1984. He spent three years designing ac and traction drives and UPS systems. In 1985, he joined Exide Electronics and ran the Canadian Engineering Department for nine years. In 1995, he founded Omni Power Inc., Toronto, ON, Canada, a supplier of motor control and power quality solutions to heavy industry. Omni Power is now installing a minimum of 30MVA of Power Conditioning equipment into North American industry every year. Mr. Ezer is a member of IEEE.

*Attendance Provides 1 'Formal Activity' PDH Towards
APEGGA Professional Development*

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Location: German Canadian Cultural Centre

8310 Roper Road (51. Ave), Edmonton, Alberta, Canada.

Date: Thursday, April 3rd, 2008.

Schedule:	Registration and Cash Bar:	06:00	PM
	Dinner:	06:45	PM
	Presentation:	07:30	PM
	Questions & Answers	08:30	pm

Seminar Fee:	IEEE Members	\$20
	IEEE Non-Members	\$30
	IEEE Life & Student Members	\$10

(Payable by cash or check)

Please have your **IEEE membership card** ready to obtain the discount or sign up for the IEEE at the registration booth and receive member's price

Registration: by Tuesday, April 1st 2008

(Please mention your choice of Vegetarian or Non-Vegetarian)

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