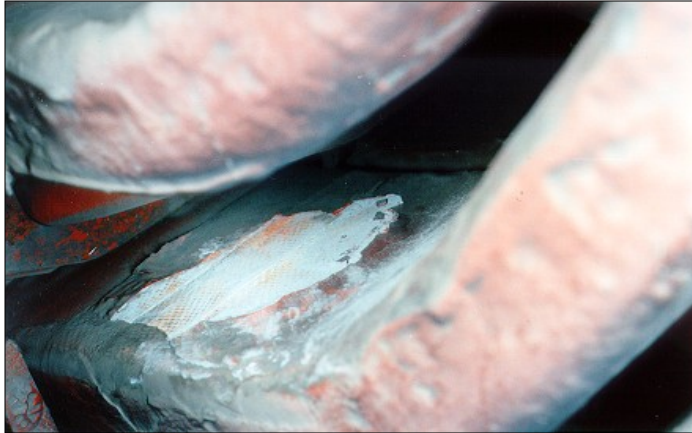


PARTIAL DISCHARGE COURSE

November 13-15, 2012
Long Beach, California



Partial discharges (PD) are small electrical sparks that occur as the stator winding insulation deteriorates. By measuring PD, one can plan when to do maintenance or when to rewind a stator.

Seminar Objectives

- to understand the basics of stator winding insulation systems and why they deteriorate
- to understand basic PD theory
- to understand how PD detection devices work
- to interpret the test data collected and relate the data to specific failure mechanisms, to enable you to plan maintenance

Who Should Attend?

The course is designed for engineering and maintenance personnel who either purchase, install, test, maintain and/or repair motors and/or generators. Consultants, manufacturers and repair shop personnel would also benefit from this course. The course is mainly intended for those involved with motors or generators rated 3kV and above.



A QUALITROL Company

Iris Power LP - Qualitrol

3110 American Drive, Mississauga, Ontario, L4V 1T2 Canada
Phone: (905) 677-4824 Fax: (905) 677-8498
khoward@qualitrolcorp.com
www.irispower.com

AGENDA

November 13-15, 2012

November 13, 2012

8:30 a.m. – 4:30 p.m.

Motor & Generator Stator Windings

- Stator Winding Design
- Coil Manufacturing Process
- Failure Mechanisms

November 14, 2012

8:30 a.m. – 4:30 p.m.

PD Theory

- PD as a Symptom
- Partial Discharge or Corona
- Void Formation
- Electrical Discharges

PD Detection

- On-line and Off-line testing
- PD sensors
- Noise Cancellation

November 15, 2012

8:30 a.m. – noon

Interpreting Test Results

- Data Presentation
- Trend Analysis
- Polarity Predominance
- Load Effect
- Temperature Effect
- Non-classic PD pulses
- Multiple Failure Mechanisms
- PD Characteristics of Failure Mechanisms

Please refer to registration form on
page 2

Partial Discharge Course

November 13-15, 2012

Long Beach, California

Registration Form

To register for the seminar please send completed form with credit card information to fax 905-677-8498 or e-mail to khoward@qualitrolcorp.com. If paying by check please make check payable to Iris Power LP and send to 3110 American Drive, Mississauga, Ontario, L4V 1T2. Please write "Iris PD Course" on the check to ensure that it is received by the appropriate department and include a completed registration form with payment.

Name: _____

Company: _____

Address: _____

Postal/Zip: _____

Telephone: _____ Fax: _____

E-mail : _____

Please print e-mail address clearly

Payment made via:(check one box)

US Check

P.O. #

Visa

MasterCard

Card # : _____

Expiration Date: _____

Card Holder Name: _____

Signature: _____

REGISTRATION
Only 35 seats available,
so register now.

Registration ends October 13, 2012

Registration includes breakfast, lunch and breaks daily. A complete set of notes is also included. **PRICE DOES NOT INCLUDE HOTEL ACCOMMODATIONS.** Confirmation will be issued upon receipt of payment.

COST
\$1195.00 USD

Send registration to:

Karen Howard
Fax: 905-677-8498
khoward@qualitrolcorp.com
Tel.:905-364-4568

LOCATION/VENUE

TBD

CANCELLATION POLICY

Cancellation received prior to October 13, 2012 will result in a \$75.00 US processing fee. Withdrawal received up to one week prior to the seminar will be subjected to a charge of \$150.00 US. There will be no refunds a week prior to the seminar. Delegate substitution is permitted.

Course Instructor

Greg Stone, Dielectrics Engineer, Greg has over 30 years of experience in the application and testing of large motor and generator windings. Prior to joining Iris in 1990, he worked at Ontario Hydro for 15 years, where he specialized in testing the machine windings of the company's 200 generators, and hundreds of motors in nuclear, fossil and hydro generating plants. He has authored or co-authored approximately 100 technical papers on motor and generator windings and testing, contributed to the writing of the "Handbook to Assess the Insulation Condition of Large Rotating Machines," an EPRI publication, and authored a chapter on electrical windings for the "Handbook of Electrical Machines," which was published by Dekker in 1995. Greg's most recent work is a book titled, "Electrical Insulation for Rotating Machines - Design, Evaluation, Aging, Testing and Repair," which was co-written with Ian Culbert, Al Boulter and Hussein Dhirani. He is active on many IEEE and IEC working groups developing standards and guides, and is a Fellow of the IEEE.