

Publications by John A. Palmer, Ph.D., P.E., C.F.E.I.

Refereed Publications

1. Palmer, John A., J. K. Nelson, and M. A. Brubaker. "The Formulation of Models for the Description of Streaming Electrification in Transformer Structures." *IEEE Transactions on Dielectrics and Electrical Insulation* vol. 10 (Dec. 2003): 920-932.
2. Palmer, John A., and J. K. Nelson. "Parametric Performance of a Transient Streaming Electrification Model." *IEEE Transactions on Dielectrics and Electrical Insulation* vol. 4 (Aug. 1997): 418-424.
3. Palmer, John A., and J. K. Nelson. "Practical Implications of Transformer Flow Electrification Studies." *Journal of Electrostatics* vol. 40/41 (1997): 693-698.
4. Palmer, John A., and J. K. Nelson. "The Simulation of Short-Term Streaming Electrification Dynamics." *Journal of Physics D: Applied Physics* 30 (1997): 1207-1213.
5. Palmer, John A., and J. K. Nelson. "Intelligent Control of Large Power Transformer Cooling Pumps." *IEEE Proceedings: Generation, Transmission, and Distribution* (Sept. 1996).
6. Palmer, John A., and J. K. Nelson. "A Method for the Repetitive Measurement of the Electrostatic Charging Tendency of Liquid Dielectrics." *IEEE Transactions on Dielectrics and Electrical Insulation* (Feb. 1996): 70-74.
7. Palmer, John A., R. C. Degeneff, T. M. McKernan, and T. M. Halleran. "Pipe-Type Cable Ampacities in the Presence of Harmonics." *IEEE Transactions on Power Delivery* vol. 8, no. 4 (Oct. 1993): 1689-1695.
8. Palmer, John A., R. C. Degeneff, T. M. McKernan, and T. M. Halleran. "Determination of the Effect of Harmonics on HPFF Pipe-Type AC/DC Resistance Ratios." *IEEE Transactions on Magnetics* vol. 29, no. 2 (Mar. 1993): 1427-1433.

Patents

1. Nelson, J. K., and John A. Palmer. "Intelligent Control of a Large Power Transformer Cooling System." *U.S. Patent number 5,838,881* (Nov. 1998).

Conferences, Symposia, and Other Publications

1. "Electrical Issues for Adjusters" PLRB/LIRB 2008 Claims Conference and Insurance Services Expo. Boston, MA. Mar. 2008.
2. "Evidence Management", CPCU monthly meeting. Presenter. Denver, Colorado, December 2007
3. Palmer, John A. "The Case of the Misleading Meter." *EC&M, The Magazine of Electrical Design, Construction & Maintenance*. Dec. 2007.
4. "Electrical Issues for Adjusters" PLRB/LIRB 2007 Claims Conference and Insurance Services Expo. Orlando, FL. Mar. 2007.
5. "The Roles of Operations, Maintenance, and Management in a Preventable Power Plant Explosion." Materials Science and Technology 2006 Conference and Exhibition. Cincinnati, OH. Oct. 2006.
6. Palmer, John A. "The Case of the Residential Screw-up." *EC&M, The Magazine of Electrical Design, Construction & Maintenance*. Sept. 2006.
7. "Lightning – Failures and Claims." Property Claims Insurance Seminar. Presenter. Knott Laboratory LLC, Centennial, CO. 21 Apr. 2006.
8. Palmer, John A. "Preventing Power Plant Explosions." *Energy-Tech*. Feb. 2006.
9. Palmer, John A. "The Case of Substation Configuration Confusion." *EC&M, The Magazine of Electrical Design, Construction & Maintenance*. Jan. 2006.
10. "Fire & Explosion Investigation" and "Preservation of Evidence." Property Claims Insurance Seminar. Presenter. Knott Laboratory LLC, Centennial, CO. 18 Nov. 2005.
11. Palmer, John A. "A Series of Preventable Events Leads to a Power Plant Explosion." *EC&M, The Magazine of Electrical Design, Construction & Maintenance*. Nov. 2004.
12. "Electrical Failures & Accidents." Property Claims Insurance Seminar. Presenter. Knott Laboratory Inc., Centennial, CO. 27 Oct. 2004.
13. Palmer, John A. "Switchgear Malfunction Results in an Electrician's Death." *The Magazine of Electrical Design, Construction & Maintenance*. Aug. 2004.

14. "Fire & Explosion Investigation." Insurance Claims Seminar. Presenter. Knott Laboratory Inc., Centennial, CO. 6 May 2004.
15. "Fire & Explosion Investigation." Insurance Claims Seminar. Presenter. Knott Laboratory Inc., Centennial, CO. 10 Dec. 2003.
16. Palmer, John A. "Electric Power Substations." Encyclopedia of Energy. MacMillian, 2001.
17. Palmer, John A. "Electric Power Transmission Lines." Encyclopedia of Energy. MacMillian, 2001.
18. "Industrial Upgrades to an Electric Machinery Laboratory." 2000 ASEE Annual Conference. St. Louis, MO. 18-21 June 2000.
19. "Effect of Aging on the Spectral Response of Transformer Oil." International Symposium on Electrical Insulation. Anaheim, CA. 2-5 Apr. 2000.
20. "Optical Methodology for the Health Assessment of Power Transformers." SPIE 5th Annual International Symposium on Nondestructive Evaluation and Health Monitoring of Aging Infrastructure. Newport Beach, CA. 7-8 Mar. 2000.
21. "Mitigation of Streaming Electrification by Intelligent Control of Oil Circulation." Symposium Proceedings: Transformer Reliability: Management of Static Electrification in Power Transformers. Monterey, CA. May 1999.
22. "Streaming Electrification Dynamics: Duct Modeling and Analysis." Symposium Proceedings: Transformer Reliability: Management of Static Electrification in Power Transformers. Monterey, CA. May 1999.
23. "Monitoring of Large Power Transformers." Proceedings. 1997 North American Power Symposium. Laramie, WY. 13-14 Oct. 1997.
24. "Streaming Electrification Dynamics in Oil/Cellulose Systems." Conference on Electrical Insulation and Dielectric Phenomena. Arlington, TX. Oct. 1994.
25. "A New Reciprocating Apparatus for the Measurement of Electrostatic Charging Tendency of Transformer Oil." EPRI Workshop, Static Electrification in Power Transformers. Milwaukee, WI. Sept. 1994.

Media Appearances

1. "Static Electricity Hazards While Filling Gas Cans." Channel 4 News. Denver. August 1997.
2. "Western States Blackout." Channel 9 News. Denver. July 1996.