

E6

Title of Abstract:

Arc Flash Hazard Regulation and Mitigation

Author(s), Company(s)

Jay L. Sperl, ABB Inc. Clint Whitney, City of Richland

Speaker, Company (if known)

Jay L. Sperl, ABB Inc.

Abstract (not to exceed 300 words)

Since 1982 when Ralph Lee provided what many consider the first research available on arc flash hazards in his landmark paper, “The Other Electrical Hazard, Electric Arc Blast Burns”; there has been growing concern about arc flash hazards in and around electrical systems. Serious study following the publication of Lee’s paper, further quantified the hazard and provided a basis for calculating specific risks in specific systems. IEEE Standard 1584 was one result of this research. Additional standards, regulations, and published papers have followed making most electrical workers aware of the hazard. But, today the different standards and regulations have also caused confusion. What standard or regulation applies when and to whom? Why do different analyses provide such wide-ranging results? And once you know the hazard you face, what options do you have? This paper will: 1. provide a historical perspective to how we got to where we are today; 2. address the different standards to be considered and what applies when and to whom; 3. discuss the mitigation options available to the protection engineer.

Contact Author:

Name: Jay Sperl

Company: ABB Inc.

Phone: Office: (281) 565-8623