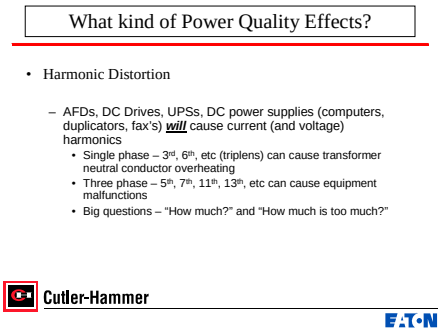
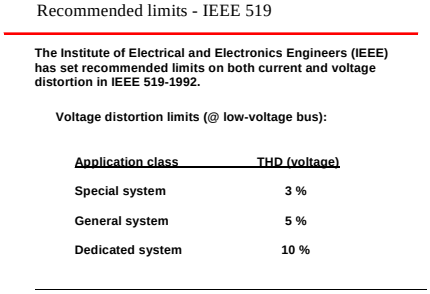
Adjustable (Variable) Frequency Drive (AFD) Impacts Covered in ISA's October 14, 2003 Palo Alto Meeting

By: Bob Webb

The Northern California Section of ISA met on October 14, 2003, at Piatti Ristorante #2, in the Stanford Shopping Center. This month's discussion was again led by Craig Chidester from Cutler Hammer who provided an excellent overview of AFD issues and how you can cost effectively deal with them. Harmonics are a significant issue, and Craig presented both IEEE recommendations and potential solutions.



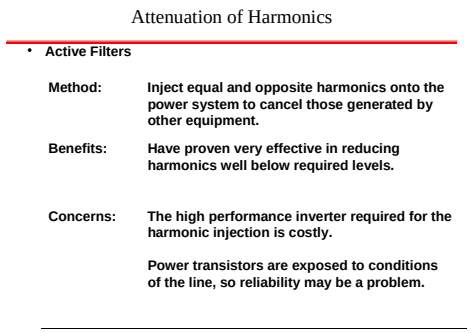
Some basic formulas & factors were presented, showing how to see the impacts of harmonics, and when and how to use the IEEE specifications to prevent unacceptable affects.

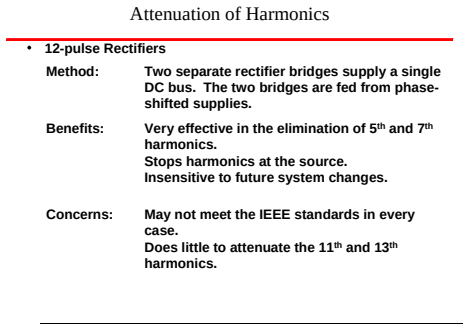


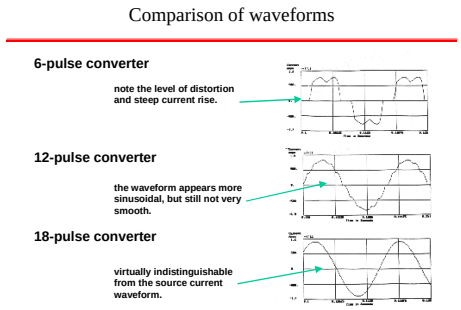
Methods discussed to deal with harmonics included adding reactance, passive filters, active filters, and 12 and 18 pulse rectifiers. Advantages and disadvantages of each were discussed.

CHANGE IN PLANS — Are these meetings of value to you? What would you change? Come on November 11th at 4:30 pm, and help to plan for 2004

Come to Piatti and bring your ideas, suggestions, or willingness to share! If you'd like, join us for dinner, after the program is set (Dutch treat).







You might say most of this material is for electrical engineers, and indeed, a lot of it is. But, as control systems engineers, technicians, and vendors, it is vital that we understand this technology, and its far reaching effects on both other equipment and our control system power supplies and systems. To review all of Craig's slides, see the NORCAL website at www.isanorcal.org

Are these meetings of value to you? Please let us know. Send an email to Marjorie Widmeyer, at mwidme@worldnet.att.net. Next month's, (November 11, 4:30 PM), will be a planning meeting for the 2004 program. If you have ideas, comments, or suggestions for change, (or more of the same), please attend let us know. Send an email if you can't make it. Or volunteer to present on a timely topic, or host a meeting and demonstrate your capabilities. NORCAL is for you. Let us know what you want!

See other changes in Palo Alto meeting plans on page ??.