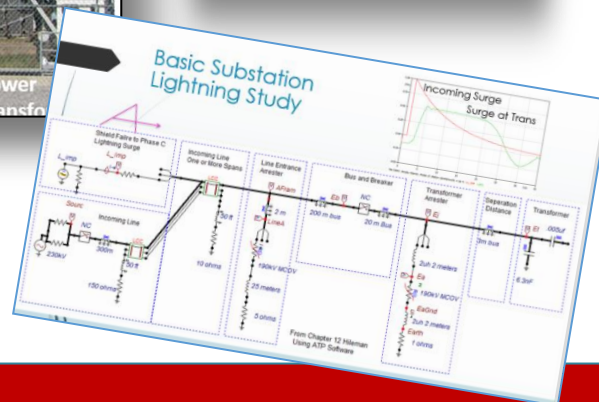
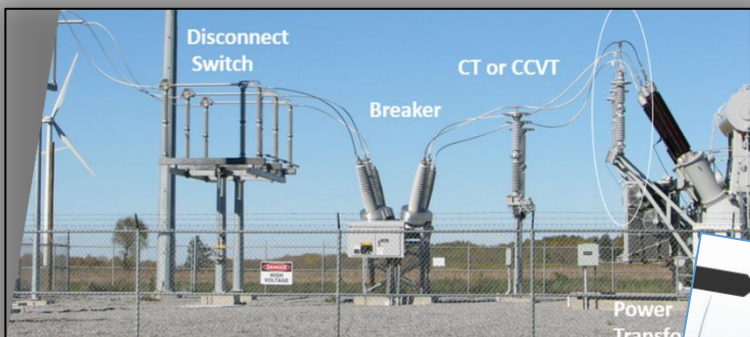
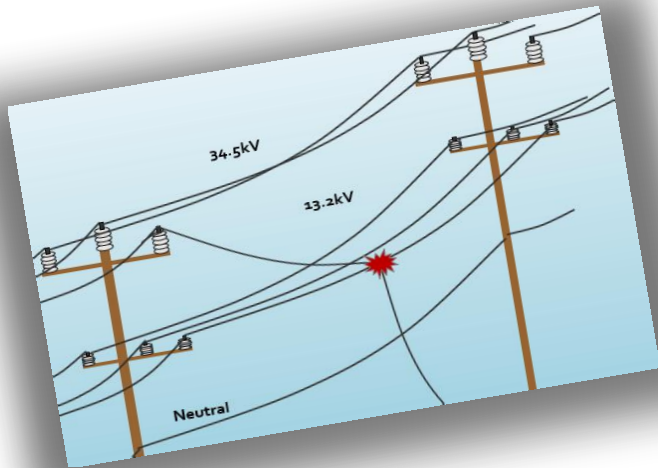


Arresters 201

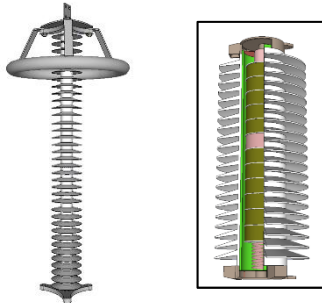
Advanced Topics of T&D Surge Protection

2x2 hr sessions over two days (4 PDH)



Arresters 201 Webinar Overview

Arresters 102 is a 4 hr webinar about covering advanced topics of lightning protection of power systems. This is an extension of Arresters 101 and covers specific topics in more detail than Arresters 101.



What Attendees Will Learn

- **Open Breaker Protection:** The rationale for installing line entrance arresters.
- **Underbuilt Circuit Protection with Arresters:** How to protect the underbuilt circuit from significant voltage surges when the upper line falls on the lower line.
- **Generator Protection :** Arresters and surge capacitors are covered in this section on typical generator applications.
- **Calculating the Value of Line Arresters:** How to justify the installation of line arresters.
- **Selecting the Correct Line Surge Arrester:** What arrester parameters are important and which ones are not.
- **Underground Distribution Circuit Protection:** This section covers the protection from the riser pole to the user.
- **Failure Mode Considerations with Arresters** Distribution and Station Class
- **Field Testing Arresters with Hipot Tester:** The easiest and fastest way to test an arrester disconnected from the system is covered in detail.
- **Field Testing Arresters with Thermal Imaging:** Procedures to follow, what temperature limits to consider, and the limitations.
- **Insulation Coordination Study Fundamentals:** Provides an understanding of the topic and why it may or may not be relevant. Provides an understanding of the topic and why.
- **Wildlife Protection of Arresters:** There are many ways to mitigate the interaction of animals and power systems. Methods at the arrester are discussed in detail.

Materials

A recording of the webinar will be available to those that would like it.

Logistics

The webinar will be presented over two days for 2 hrs each day. PDH Certificates will be granted to those completing the homework and additional time will also be granted for homework time.

Who Should Attend?

- Those who have attended Arresters 101 or power systems professionals with experience in system protection

Instructor

Jonathan Woodworth, Consulting Engineer, ArresterWorks, started his career at Fermi National Accelerator Laboratory in Batavia, IL after receiving his bachelor's degree in Electronic Engineering from The Ohio Institute of Technology in 1972. As an Engineering Physicist at Fermi Lab, he was an integral member of the high energy particle physics team in search of the elusive quark. In 1979 he joined the design engineering team at McGraw Edison (later Cooper Power Systems) in Olean, NY. Returning to school after many years in industry, Jonathan received his MBA from St. Bonaventure University in 1995. Jonathan was employed for 28 years at Cooper Power System where he served as Engineering Manager for 13 years. Additionally, he held the position of Arrester Marketing Manager for 7 years.



In 2007 Jonathan along with business and life partner Deborah Limburg started up Arrester Works a surge protecting consultancy that serves the surge protection industry worldwide.

Jonathan is very active in the IEEE and IEC standard associations previously serving as Chair of the Surge Protective Devices Committee of IEEE PES, Chair of the NEMA High Voltage Arrester Section, and currently Co-Convener of the IECTC37 MT4 committee responsible for IEC Arrester Standards and Convener of the IEEE High Voltage Arrester Test Standard Working Group.

Webinar Outline



Part 1 (Day 1, 2 hrs)

- **Open Breaker Protection**
- **Underbuilt Circuit Protection with Arresters**
- **Generator Protection**
- **Justifying the Installation of Line Surge Arresters**
- **Selecting the correct transmission line Arrester**

Homework

For those wishing PDH certificates, homework based on the day's discussion will be required.

Part 2 (Day 2, 2 hrs)

- **Underground Distribution Circuit Protection**
- **Failure Mode Considerations with Arresters**
- **Field Testing Arresters with Hipot Tester:**
- **Field Testing Arresters with Thermal Imaging**
- **Insulation Coordination Fundamentals**
- **Wildlife Protection of Arresters**

Homework

For those wishing PDH certificates, homework based on the day's discussion will be required.