



Instructor Background And Information Form

Thank you for filling out this form.

Presentation Title: SAFE, NON-CONTACT TROUBLESHOOTING OF MOTORS AND CONTROLS

Presenter: CHUCK ARRERA Title: OWNER

Employer: ARRERA ENGINEERING Address: 85350 S VARYERUD RD.

City: EUGENE State: OR Zip: 97405 Phone: 541-501-9904

Summary of Lesson content: SEE ATTACHED

Professional Background: (Note a brief - 2 page maximum - resume may be submitted in lieu of the following data. Please be sure the resume includes all requested information. Qualifications should be related to your presentation.) Use the reverse side of this form if more room is needed to fully answer the following questions.

Primary Knowledge/Skills/Abilities related to presentation: SEE ATTACHED

Education (High School, Upgrades, Colleges and Degrees): B.S. OREGON STATE, 1967

Professional Registration/Certification: OREGON PROFESSIONAL ENGINEER 1976 - 2008 (RETIRED)

Related papers/instruction you have presented:

Title: SAME Date: 2017 Event: AWWA SHORT SCHOOL

Title: _____ Date: _____ Event: _____

Professional Organizations/Activities: AWWA Date: CURRENT

Date: _____

Course sponsor: CASCADE TO COAST SUB-SECTION

Signature of Instructor: [Signature] Date: 7/30/22

DO NOT WRITE BELOW THIS LINE

Date Evaluated: _____ By: _____ Approved: Yes _____ No _____

Return Completed Form To: OESAC CEU COMMITTEE P.O. Box 577 Canby, OR 97013-0577 Email: info@oesac.org Phone: 503-698-6486

Safe, Non-Contact, Troubleshooting of Motors and Controls

Operators can significantly improve the reliability of their treatment plants and pumps stations by improving their understanding of plant electrical and control systems. Many valuable troubleshooting tasks can be completed without the specialized training of an electrician or controls specialist. When things do go wrong, the operator must decide when to call in the appropriate specialist and how to explain the problem.

This one-hour presentation will focus on information that will lead to safe, non-contact troubleshooting that will prove valuable in day to day operations and shorten down time during emergencies.

Topics covered will include:

- Understanding the layout of your plant electrical system.
 - Example: Do I call the power company or an electrician?
- What visual indicators do I have to assist me in trouble shooting:
 - Example : Is that LED on my VFD normally red?
- Observing operating temperatures, sounds and smells
 - Example: What is the normal operating temperature for that motor and what is too hot?
- Understanding documentation and reading drawings.
 - Example: During an emergency is not the time to decide if these are the "real" As-built drawings.

Operators will leave with significant homework assignments if they choose to learn more about the inner workings of their plant.

Bio for Chuck Arrera

Chuck has worked in utility operations for over 50 years. He is a retired Civil and Control Systems engineer and Industrial Plant electrician. Chuck has taught continuing education classes for utility plant operators, mechanics, electricians, and instrument technicians. Classes and have been presented from coast to coast on the mainland United States and throughout the Pacific Islands.