



**David P. Blanchard**  
PSAM12 Speaker Bio

## **Risk-Informed Safety Margin Characterization Case Study: Use of Prevention Analysis in the Selection of Electrical Equipment to Be Subjected to Environmental Qualification**

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**Short Statement:** Co-author along with Dr. R. W. Youngblood

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### **BIOGRAPHY**

Dave Blanchard is President of Applied Reliability Engineering, Inc. (AREI). He has been developing and applying PRA for over 30 years. He began as plant project engineer for one of the first risk-informed applications of PRA in developing alternative resolutions to selected items of the TMI Action Plan at Consumers Power Company's Big Rock Point Plant.

While with TENERA LLC, Dave assisted numerous utilities in developing their PRAs in response to the IPE and IPEEE Generic Letters while developing staffs of engineers and analysts fully capable of developing and applying their PRAs on day to day issues.

In recent years, Dave and employees of AREI have developed methods and published industry guidance for a number of issues including

- risk-informed turbine missile analyses
- generation risk assessment
- risk-informed physical security
- modeling digital I&C in PRA, and
- risk-informed electrical equipment qualification.



Along with R. B. Worrell of Logic Analysts, Inc., Dave also is co-developer of a method and related software known as Top Event Prevention (TEP) or prevention analysis which is a combinatorial optimization technique that addresses many of the limitations of traditional importance measures.