MARACOR Update

Welcome!

Welcome to the first edition of **MARACOR Update**. In this and future editions, we will keep you informed of new projects we are involved with, new software tools we have developed, and other news of interest about our company and staff.

MARACOR Software & Engineering, Inc. provides engineering consulting services and technical software development, primarily for the electric utility industry.

Our staff consists of experienced engineers with proven track records of technical capability, customer service, and on-time product delivery. Our service areas include Probabilistic Safety Assessment (PSA), Maintenance Rule support, PSA applications, reliability analysis, maintenance optimization, database applications, and cost-benefit analysis. We hope you continue to consider **MARACOR** to support your technical consulting needs.

Recent Activities

In this section, an overview of key technical projects is provided.

For more information about any of these projects, please contact us using the information provided at the end of this newsletter

Configuration Risk Management (CRM)

Maracor performed two unique CRM projects for San Onofre to help enhance plant performance. A dual-unit trip/power reduction avoidance model was completed, which can help avert inadvertent shutdowns. Also, hazard barrier impacts (HELB, flooding and EQ barriers) were incorporated into a portion of their CRM model to add increased flexibility for their barrier management program.

For Millstone, an EOOS transition modes model was developed, which helped to highlight key actions and important equipment during these modes.

Maracor was recently selected to support EPRI's Configuration Risk Management Forum. Three research tasks are underway to develop CRM guidelines for the industry.

PSA Update and Application Projects

Support was provided for the recent Surry PSA update. Specific tasks included Level 2 update, and enhancements in Station Blackout and ISLOCA modeling.

At D.C. Cook, Maracor is performing an extensive update of the plant's ISLOCA analysis. We are also helping at Cook to complete the Severe Accident Mitigation Analysis (SAMA) in support of License Renewal.
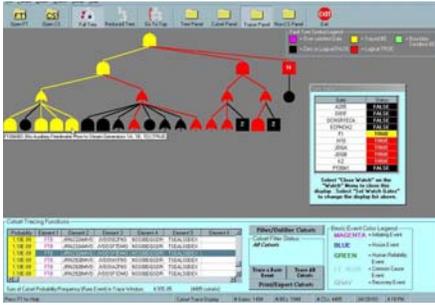
At Fort Calhoun, Maracor helped to create detailed event trees from the existing EOOS top logic model to provide plant staff with a more accurate understanding of the PSA model and results.

Training Programs

Maracor assisted TXU in an update to their extensive PSA training program to incorporate student feedback.

Maracor also provided Defense-in-Depth model development training for a Korean organization.

This fall, Maracor will conduct a Maintenance Rule & Maintenance Optimization training seminar in Tokyo for various Japanese utilities.

Software Tools

Maracor develops software tools for PC desktop applications as well as web-enabled applications. We provide several off-the-shelf products, and develop custom software tools to meet specific client needs.

Earlier this year, Maracor released an expanded version of its **VisFT™** fault tree diagnostic program. This latest version adds support for EPRI's CAFTA for Windows™ fault tree models and supports the analysis of even larger models than previous versions. The next version (scheduled for release in early 2004) will add additional CAFTA support and additional diagnostic capabilities.

A new tool, called **SM-Uncert™**, was also developed for use at San Onofre. SM-Uncert is an easy-to-use probabilistic uncertainty tool that can perform as-needed uncertainty analyses of configuration-specific risk results produced by Safety Monitor™. The tool can also be readily adapted to support analyses performed by other industry-standard risk analysis tools.

SM-Uncert utilizes PC versions of the LHS and TEMAC programs developed by Sandia National Laboratories. The original mainframe-based codes were ported to the PC for use under Windows® 98 (and later) and each program's features were enhanced to support the needs of today's complex "master fault tree" configuration risk models.

Please visit our Web Site, www.maracor.com, to obtain additional information about our products and services. On our Web Site, you can also review our most recent news releases and product announcements. Additional copies of **MARACOR Update** are also available there for downloading. In the future, watch for the availability of downloads of demonstration versions of some of our software products as well.

New Additions to our Staff…

We were pleased to welcome two experienced PSA professionals to our staff this summer. **Jeff Leary** is a skilled analyst with expertise in Level 1, Level 2, and CRM model development. **Russ Sharpe** is an experienced Level 1 PSA analyst with specific expertise in fire PSA, shutdown PSA, and ISLOCA modeling. Both Russ and Jeff have used many of the most commonly used PSA tools, including WinNUPRA™, CAFTA for Windows™, and Safety Monitor™.

How to Contact Us

MARACOR operates from three primary office locations, with additional personnel located in Delaware and Tennessee. Please contact the office nearest to you for specific information about our capabilities and services:

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