

MARACOR Update

Issue No. 3

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New Clients... New Projects

Welcome to the 3rd semi-annual issue of **MARACOR Update**. Several key projects, many for new clients, have begun over the last six months. Additional experienced staff has been added and we have established cooperative relationships with several specialty consulting firms to meet client needs.

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), Configuration Risk Management/Maintenance Rule support, PSA applications, reliability analysis, maintenance optimization, software 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 consulting projects is provided. For more information about any of these projects, please see the contact information provided at the end of this newsletter

Configuration Risk Management (CRM)

Research continues on several technical tasks for the EPRI Configuration Risk Management Forum (CRMF), and planning is now beginning for the next CRMF meeting, to be held in January 2005. Current projects, such as the treatment of external events in CRM, grid stability issues, and the overall cost-benefit of CRM programs, will be discussed.

Maracor was awarded a project by Duke Energy to migrate their existing fault tree and Defense-in-Depth (DID) CRM models to the

Safety Monitor™ software for all three Duke stations.

For a STARS Alliance joint project, Maracor is developing a common framework for shutdown DID models for six plant sites, incorporating the best practices from each plant. The new models will be designed for use in both EOOS™ and Safety Monitor.

PSA Enhancement

Maracor continues to support Dominion in a series of major model enhancements for Millstone 2 & 3. Internal flooding analysis updates are nearing completion. Work is also underway on the development of quantitative shutdown

models for both plants for implementation in EOOS.

Maracor was recently selected as part of a team to assist San Onofre in resolving comments received from a recent pilot Certification to the ASME PRA Standard. The team will be leading the resolution of several key issues, as well as providing project management and re-certification support.

PSA Applications

Maracor continues to provide technical support for Severe Accident Mitigation Analysis (SAMA) license renewal activities. Work was performed in support of D.C. Cook, Millstone and Beaver Valley.

Training Services

Maracor conducted training for the Entergy South plants in the development of transition risk models in EOOS and the steps needed to implement Risk-Informed TSTF-359 for relaxation of mode restraints.

Maracor is assisting in assessing current maintenance practices at a Japanese nuclear utility and providing training in the use of reliability-centered maintenance, standardized PM templates, and software tools to assist in maintenance and asset management.

Software Tools

Maracor continues to develop and enhance software tools for PC Windows® desktop and Web-enabled applications. We provide

several off-the-shelf products, and can develop custom tools to meet specific needs.

An Excel®-based cost-benefit tool has been developed for SCE's Power Delivery group to help rank Infrastructure Replacement and Load Growth projects. Further enhancement of the tool and methodology (including the creation of a stand-alone version for easy use by SCE staff) is ongoing.

Maracor is enhancing its SM-UNCERT software tool to accept data inputs from the R-DAT™ data analysis package and the WinNUPRA™ PRA code suite. SM-UNCERT uses

the NRC-developed LHS and TEMAC codes to perform uncertainty analysis using a variety of data distributions.

Development of the next update to our **VisFT™** fault tree diagnostic program continues, but was slowed to allow other software development projects to be completed. We hope to release this new update in the coming months. The next version will enhance its support for fault tree models maintained in CAFTA for Windows™. New features are also being added to provide the PRA analyst with additional diagnostic capabilities for their fault tree 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.

New Additions to our Staff...

Eric Jorgenson recently joined the Maracor staff, coming on board in September 2004. Eric, based in Washington State, is an experienced PRA consulting engineer with particular experience in Level 1 PRA, fire PRA, and seismic PRA.

How to Contact Us

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

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