

MARACOR Update

Issue No. 14

March 2010

External Events & Configuration Risk

Welcome to the current issue of Maracor Update and the start of our 8th year of providing risk services! NRC is pressing for inclusion of Fire & other External Events risk impacts within the Configuration Risk Management program at each plant. Having realistic but easy-to-use risk methods will be vital for keeping maintenance processes efficient.

MARACOR Software & Engineering, Inc. provides analytical 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 consider **MARACOR** to support your technical consulting needs.

Recent Activities

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

PSA Enhancement and Applications

Maracor recently assisted in the update of the Farley PSA, following the successful completion of the Hatch PSA update (including Peer Review). Key areas of support for Farley included a LERF update, and development of summary and roadmap documents.

For Xcel Energy, we are providing assistance in the completion of internal events PSA updates for the Monticello and Prairie Island plants. Supported activities have included initiating events, success criteria, sources of uncertainty, and human error modeling.

Maracor also continues to support NFPA-805 fire PSA activities for both plants.

For Palo Verde, Maracor personnel provided on-the-job training and technical guidance to the plant staff for internal flooding PSA walkdowns, flood area and flood source screening, and flood model development.

At Prairie Island, our staff is assisting in evaluating the risk significance of issues related to high-energy line break-induced flooding potentially impacting safety-related equipment in the turbine building.

At San Onofre, Maracor personnel are supporting the completion of various fire PSA tasks required

for the plant's NFPA-805 transition project.

At Columbia, Maracor is participating in the MSO expert panel and cable selection activities, as well as updating the overall PSA model to support fire model integration.

Maracor personnel also continue to support PWR and BWR Owners Group internal events and fire PSA peer reviews.

Configuration Risk Management (CRM)

For EPRI's Configuration Risk Management Forum, a project is underway to define practical simplified methods for including fire and other external events risks in Maintenance Rule (a)(4) evaluations.

New Plant PSA

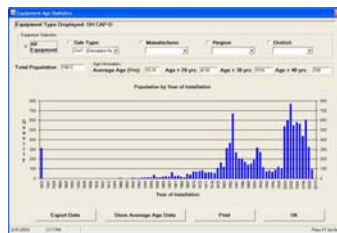
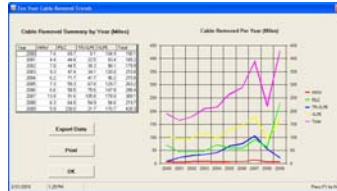
Maracor is assisting in the development of the PRA in support of the design certification submittal for the B&W mPower™ small modular reactor. Recent activities have included the development of a preliminary risk estimate for the plant, initiating events identification/grouping, and providing risk insights in support of plant design decisions.

Maracor is also providing support to Dominion in the development of the Severe Accident Mitigation Design Alternatives and severe accident analyses for North Anna Unit 3.

Software Tools

Maracor develops and enhances software tools for PC Windows® desktop & Web-enabled uses. We can also develop custom tools to meet specific needs.

Ongoing software development support is being provided to SCE's power delivery group in the development of a "Living Database" system that integrates data from over a dozen equipment inventory and history databases to provide various analysis and trending features.



Living Database Displays

Maracor also recently developed a data screening/import program to allow San Onofre to more easily import plant status change information into the Safety Monitor™.

Other Maracor-developed software tools include:

- **VisFT™ (Advanced Fault Tree Diagnostics).**
- **SM-UNCERT™ (Enhanced Uncertainty Analysis)**

Our tools can interface with many of the industry's PSA software suites.

Please contact us for more information about any of these products, or any plant-specific software development needs you may have.

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** (including previous issues) are also available there for downloading.

How to Contact Us

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

Thomas Morgan
MARACOR
3615 Westchester Court
Middletown, MD 21769
(301) 371-3260
tmorgan@maracor.com

Diane Jones
MARACOR
175 – 57th Court
West Des Moines, IA 50266
(515) 221-0096
djones@maracor.com

Ray Dremel
MARACOR
1361 Towne Avenue
Batavia, IL 60510
(630) 406-8205
rdremel@maracor.com

B&W mPower™ is a trademark of the Babcock & Wilcox Company.

Windows® is a registered trademark of Microsoft Corp. Safety Monitor is a trademark of Curtiss-Wright Flow Control Corporation.

© 2010, Maracor Software & Engineering, Inc., All rights reserved.