

# MARACOR Update

Issue No. 2

March 2004

## Year #2 Begins

Welcome to the 2<sup>nd</sup> issue of **MARACOR Update**, our semi-annual newsletter. January 2004 marked the start of our second full year of operation, and we are thankful for our clients who made our first year a success. Our staff size has doubled over the past year in response to our clients' 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), Maintenance Rule/SDP 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

Here is an overview of some of our recent technical projects. For more information about any of these projects, please see the contact information provided at the end of this newsletter

### Configuration Risk Management (CRM)

Last year, EPRI selected Maracor support its Configuration Risk Management Forum (CRMF). An industry-wide benchmarking survey was conducted on CRM practices. EPRI TR-1007972 and two other informal EPRI reports were issued for industry use.

At this January's very successful CRMF industry meeting, further tasks were selected by the CRMF for Maracor to conduct, including the development of guidelines for treatment of external events in CRM, and quantifying the cost-benefit of utility CRM programs.

For Millstone 3, Maracor developed a transition modes EOOS model. The project included development of a detailed feedwater/condensate fault tree for use in the at-power and transition modes models. This new system model has already helped in responding to recent regulatory requests.

### PSA Enhancement

Maracor continues to support PSA updates for North Anna and Surry. This project includes Certification comment resolution, improvements to RCP Seal LOCA modeling and human error dependency treatment, a Level 2 update, and a significant reformatting of the PSA documentation.

Work has also begun on major internal flooding PSA updates for both Millstone units, using state-of-the-art methods. In a related activity, Maracor is supporting EPRI in a flooding analysis guideline development effort.

### PSA Applications

At D.C. Cook, the risk benefits of potential design changes to reduce plant risk from RCP seal LOCAs and hydrogen combustion during SBO events were evaluated. Maracor also continues to provide RAI response support for Cook's Severe Accident Mitigation Analysis (SAMA) performed for the license renewal project.

A quantitative shutdown model is now being

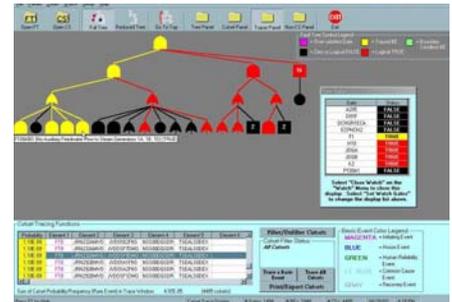
developed by Maracor for both Millstone units to support SDP and other plant needs. This model will later be linked to the plant's existing Defense-In-Depth model to provide plant personnel with a more comprehensive assessment of plant shutdown risk.

## Software Tools

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

Later this year, Maracor will release the next version of its **VisFT™** fault tree diagnostic program. This new version will enhance the support provided for fault tree models maintained in CAFTA for Windows™, including support for all of CAFTA's gate types. Additional tools are also being added to provide the PRA analyst with additional diagnostic capabilities for their fault tree models. As with previous versions, VisFT™ also fully supports WinNUPRA and Safety Monitor™ models.

Several new software products are currently in development. Look for more details about these new tools in the next issue of **MARACOR Update** this fall!



Please visit our Web Site, [www.maracor.com](http://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 **Steve Phillippi** to the Maracor staff in January 2004. Steve is a consulting engineer with experience in Level 1 PRA, hazard barrier analysis, fire PRA, and database design and development. He is currently assisting Dominion in the continued enhancement of their PRA Configuration Control Database, as well as supporting updates to their PRA system notebook format and assisting in flooding PSA activities. As is the rest of our staff, Steve is familiar with many of the industry's PRA tools, including WinNUPRA, CAFTA, and Safety Monitor.

## How to Contact Us

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

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