



Callaway engineers help design software for their needs

IF TOM STOTLAR and Scott Clardy sound like proponents of configuration management software used at AmerenUE's Callaway nuclear power plant, it is because they helped design a portion of it.

Stotlar, supervising engineer of Configuration Management at Callaway, and Clardy, Configuration Management supervisor, converted a basic software package into two applications tailored to the plant's needs. The first, called Callaway Document Room, is a Web-based portal that allows users to search, retrieve, view, and print any of the plant's 3 million documents and records from any location using a standard Web browser. The second, called Callaway Director, is an intuitive interface for managing Callaway's equipment list and nuclear engineering design change process in accordance with industry best practices.

"Each of these applications allows electronic signatures to be captured throughout the review cycle," Clardy said. "The signatures are stored with the document so that our quality assurance records are complete, showing electronically who reviewed the document and who signed off on it."

The software also tracks the setpoints for instrumentation changes and manages all of the cable and raceway information, including the calculations for mechanical and combustible loading and percent fill, Clardy added. "Essentially, what we have is our entire engineering design tool for drawings

The Callaway Document Room and the Callaway Director are two applications developed at the Callaway nuclear plant.

and components all in one place, the management and modifications process in the same location," he said. "Other plants do some of these things, but their information is scattered across several pieces of software. It's not all in one tool, so they must use multiple software systems to retrieve the same information. What is unique with Callaway is that it's all managed and housed in the same computer application."

Stotlar said that the amount of money that the plant has saved by using the software is impossible to know, but he guesses that there has been a 25–30 percent savings on labor costs and materials expenses by going electronic to replace paper drawings four years ago. That was when Callaway started using eB Nuclear, a configuration management software suite from Enterprise Informatics, of San Diego, Calif. Clardy said that he and Stotlar worked with AmerenUE's information technology department to enhance the basic software so that an untrained user could search for and retrieve documents. The result was the creation of Callaway Document Room and Callaway Director. "Our mission was to try to make it user-friendly, to make the whole application work

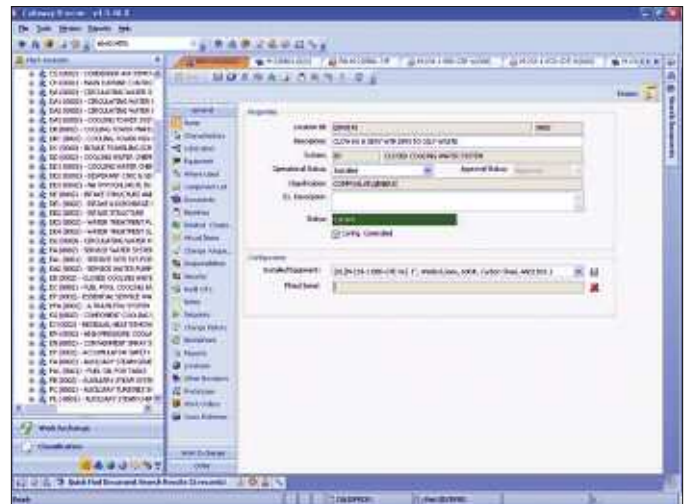
on the computer by using a drag-and-drop type interface so that there would be no key-strokes required," Clardy said.

The interface developed includes on-screen "wizards" that walk the user through the steps. "The program will now help you to create your design package," he said.

Other plant groups at Callaway have begun taking advantage of the availability of the software, including using it to manage design-basis documents and license-change documents.

Since the development of the Callaway enhancements, a Nuclear eB Users Group, chaired by Clardy, has started up. The Department of Energy has shown interest in using the applications at its national laboratories, and the Wolf Creek nuclear plant is currently loading data and testing the software. Constellation Nuclear has also implemented the software to manage equipment, documents, and records for its fleet of reactors, according to Clardy.

Enterprise Informatics has obtained the rights to the enhancements from AmerenUE and has incorporated them into its standard eB Nuclear offering, making them available to the rest of the nuclear industry. **IN**



At left, data from a drawing is displayed on Callaway Document Room and at right, a Callaway Director screen shot shows information for a valve. (Graphics: Callaway)