Southern Company’s Project Information Management System

In 2004, Southern Company began a network-spanning $7.5 billion environmental construction program, the largest environmental construction program the company has ever managed. The Project Information Management System, or PIMS, launched in 2005, drives the success of this construction program. It has revolutionized the way the Southern Company works with its partners; making our projects safer, more efficient and more productive.

PIMS is an open-collaborative system that Southern Company Generation uses to manage construction projects. It provides business process and procedure compliance via online forms management. It houses key forms and routes them along appropriate workflows, creating an information trail used as a permanent record of generation construction projects.

Prior to PIMS, Southern Company, like many construction customers, used a diverse set of unrelated tools to manage projects. Tools like email communication, fax transmittals, paper processes, and document storage devices in many different locations were inadequate to track and report on status. Today, PIMS manages over 70 separate projects, and we see this number escalating well into several hundred in the next few years. In the eight months since its initial implementation, the total number of PIMS users has grown at a rate of 10% each month to its current number of 1150 users. There are 104 companies in the United States, Denmark, Japan, Germany, and Canada collaborating through PIMS.

PIMS improves the quality of construction process performance in real-time. Constant communication between stakeholders, that are often geographically dispersed, allows for timely feedback eliminating expensive rework or delayed design and construction activity. We have experienced dramatic success in this area of work with Chiyoda, our Japanese vendor for our scrubber process islands. Prior to PIMS, a Chiyoda representative spent every other month on site reviewing drawings, an expensive and cumbersome process. With PIMS, design review occurs as the documents are produced and from any location in the world, not just our offices, proving its true efficiency and worth.

The true innovation in PIMS is the way it facilitates communication between construction management, engineering design, construction contractors, vendors, and plant management. PIMS combines project management and technology to produce a global collaborative network. All stakeholders, owners, vendors and contractors work in a single system with a single set of data. Each communicates through a controlled environment and applies common practices to joint projects.

PIMS delivers true compliance automation. As the system records, routes, tracks and notifies it creates a documented trail of decision making that follows established processes and procedures across the Southern Company enterprise, ultimately dramatically reducing construction project risk. PIMS creates an environment that enables full compliance and consistency across the projects in key areas that include how we communicate, administer contracts, store documents, share lessons learned, manage gained knowledge, track, analyze, report projects, and manage our working relationships.

Electric utilities are controlled by regulatory requirements at a state and federal level. Legislation like Sarbanes-Oxley, the Energy Policy Act, and the Clean Air Act put stringent compliance guidelines on our company. Agencies like the Federal Energy Regulatory Commission, Environmental Protection Agency and state Public Service Commissions require the ability to report at a granular level. PIMS enables compliance with these laws at Southern Company. PIMS can demonstrate consistency and comparability across all projects. Change orders are managed with automatic notices, and up-to-the-minute document management keeps everyone informed. Open-item reporting provides a mechanism for tracking and reporting issues to be resolved, preventing items from slipping off the radar, and allowing the entire team to remain focused on the projects.

The system also delivers advanced reporting functionality. All information input into PIMS is stored in a common repository that provides trending across our fleet of projects on items such as: safety, contractor performance, productivity and budget. A critical form for these projects is the non-compliance report, a document used to communicate non-conformances in work and material. This report delivers a foundation for a common discussion between stakeholders to resolve issues and insure a quality project.

PIMS has provided unanticipated benefits as a disaster recovery tool, seen in our work with our design partner Advatech. Shortly before a critical design deadline, Hurricane Katrina destroyed the Advatech offices in New Orleans. Over 750 drawings that, prior to PIMS would have been driven in hard copy form to our offices, were transmitted for engineering review in a single morning. In addition, PIMS allowed us to continue our work with Advatech designers spread out across the state by facilitating our communication and providing a platform for electronic file sharing and coordination.

PIMS is built on a platform of two Microsoft technologies: ISA (Internet Security and Accelerator) and Sharepoint. PIMS is the first application to reside inside our firewall that provides secured access to external users to internal information via the Internet. This unique utilization of these technologies prompted Microsoft to inquire about a case study with us demonstrating this innovative use of their technology. Its security framework drives an effective collaboration between its users, while upholding its system of roles and permissions defined by business rules. The technology architecture created for PIMS is scalable and has the potential to become the standard tool for managing all third-party connectivity at Southern Company.

As in the rest of the construction industry, Southern Company’s priorities for any project are safety, quality, schedule, and budget. PIMS has improved the quality of our projects, our safety management, and productivity while also effectively reducing costs to shareholders and ratepayers.