



Best Practices in In-Processing and Access Authorization

AN IPAA SUITE SUCCESS STORY

“Now that SSIS does the calculations, we have eliminated manual data-entry errors. Because everything is in SSIS, we don’t have to go to 10 different locations to get the information we need.”

— Cynthia Bomyea, Supervisor, Nuclear Security Staff

Organization

DTE Energy

Challenge

Streamline slow in-processing, access authorization, and fitness-for-duty

Solution

Reduce man hours, wait times, and manual effort while improving accuracy by implementing Curtiss-Wright’s IPAA suite

Results

Activities associated with in-processing, access authorization, and fitness-for-duty for utility and supplemental personnel are streamlined, reducing cost and time spent

Operating at 1.1 million kilowatts, DTE Energy’s Fermi 2 nuclear power plant represents 30 percent of Michigan’s total nuclear generation capacity, and has been designated as one of the nation’s best-performing nuclear facilities. This reputation for performance extends to the plant’s Nuclear Security department, where Cynthia Bomyea and the other members of the Nuclear Security team manage in-processing, access authorization, and fitness-for-duty requirements for thousands of workers. Curtiss-Wright’s In-Processing and Access Authorization (IPAA) suite streamlines their activities.

Before they started using the Curtiss-Wright software, Bomyea and her team had to manually route, verify, and input a huge amount of information throughout the access authorization and in-processing cycle. “We had to interact with 15 different databases to complete each case, including databases for drug screening results, Electronic Personal History Questionnaires (ePHQs), reinvestigations, individual training, PADS information, and more,” she says. “It was tedious and very slow.”

For example, the team had to print the ePHQs, background reports, PADS synopsis sheets, fingerprints, psychological results, and everything relative to granting access. Today IPAA maintains all this information, and structures a workflow to verify compliance.

GETTING UP AND RUNNING WITH IPAA

Curtiss-Wright worked closely with DTE to install and configure the IPAA software and integrate it with several of the plant’s critical information systems such as HR, security, and training. Time was of the essence: DTE set an aggressive implementation schedule that would allow them to get up and running in time for a pending outage.

“We had constant support from Curtiss-Wright throughout the implementation process,” Bomyea says. “They understood the importance of getting the system up and running prior to the outage. They were very professional, very efficient, and they provided us with a product that met all our requirements.”

Immediately following the IPAA implementation, DTE took down the reactor and brought in 1,387 temporary workers.

Best Practices in Plant Reliability and Performance

“We saved \$80,000 in overtime pay for the Security department alone by automating access-authorization and fitness-for-duty tasks.”

— Cynthia Bomyea, Supervisor, Nuclear Security Staff

As is the case at any nuclear power plant, before these professionals could begin, Bomyea’s team had to gather current information about access authorization requirements, such as drug screenings, background investigations, credit checks, criminal history checks, and psychological tests.

Much of that workflow was successfully automated by the IPAA suite. For example, the ePHQ module gave them an electronic version of the industry standard PHQs defined by NEI 08-06. The software includes comprehensive data validation, date gap validation, and scope expansion features to ensure that each applicant properly completes the PHQ the first time.

According to Bomyea, DTE had another ePHQ system in the past, but it lacked the rich functionality of Curtiss-Wright’s ePHQ software. “We had to take the in-processing list, search for an individual in PADS, verify the background type, and manually send separate email messages to each worker, with a link to complete their ePHQ,” she explains.

Once these individuals completed the ePHQ, the Nuclear Security team had to review it, save the document as a PDF, and then email it to a third-party vendor to complete each background report. Today, that entire cycle is automated.

In addition, ePHQ integrates with Curtiss-Wright’s Security Screening Information System (SSIS) to eliminate other manual activities. “All aspects of the process are easier with SSIS and ePHQ,” Bomyea says. “SSIS checks the PADS database, retrieves the date, and calculates the background type. Once we review the information and complete it in SSIS, an email message is automatically sent to the worker to do the ePHQ. After the team reviews the ePHQ, SSIS sends it to the vendor to complete the background report. It saves at least an hour and a half for each worker.”

These time-savings add up fast. For example, before DTE brought in IPAA, Bomyea had five people dedicated to the ePHQ process. It took several days to review each worker’s information and verify the access profiles in PADS. “It wasn’t very accurate or efficient,” she adds. “Now that SSIS does the calculations, we have eliminated manual data-entry errors. Because everything is in SSIS, we don’t have to go to 10 different locations to get the information we need.”

CENTRALIZED DATA AND AUTOMATED WORKFLOWS

SSIS is now the central repository for in-processing, out-processing, and 30-day revalidations as required by the Nuclear Regulatory Commission. It also handles reinvestigation, access-level change requests, and fitness for duty testing, and automatically inputs information to PADS as DTE grants and terminates access to workers.

Another IPAA module, Ready2Work, helps DTE determine which activities, trainings, and screenings each worker needs to complete so they can get on the job quickly. Ready2Work schedules workers for training and tracks worker progress. It integrates directly with the NANTeL system, which means the in-processing team no longer has to manually complete the NANTeL roster, enroll workers, or import worker information as they complete their training.

Concurrently, SSIS establishes the Access Authorization and Fitness for Duty requirements, such as drug screenings, background investigations, credit checks, criminal history checks, and psychological tests. As resources are hired, they are assigned to specific contracts, categories, and arrival dates. Assigning them to categories determines the activities these resources will need to complete to work at the plant.

If a worker has recently come from another plant there will be fewer requirements for that worker. SSIS calculates and monitors all these variables.

“We use SSIS to create unescorted access requests that define the names, social security numbers, and other information about the individuals who will fill those roles,” Bomyea explains. “The Training and In Processing team determines which activities each worker needs to complete based on their previous experience.”

Before they started using IPAA, badging 1,400 workers for unescorted access during an outage required five or six days of work for Bomyea and her staff, and they had to bring in seven or eight temporary workers to help them shoulder the load. “Prior to IPAA it was ‘all hands on deck’ to manage the work load, and the Security team had reach out to other departments for assistance,” she recalls.

Now the entire process is much more efficient: By using IPAA

Best Practices in Plant Reliability and Performance

during the recent outage, Bomyea's team completed the job in just two days—and they only needed one temporary worker. “We saved \$80,000 in overtime pay for the Security department alone by automating access-authorization and fitness-for-duty tasks,” Bomyea adds. “This is partly because Curtiss-Wright did such an excellent job training us on how to use the software, and they remain available to troubleshoot any issues that we encounter. They understand our processes and they are very easy to work with.”

BOOSTING EFFICIENCY THROUGHOUT THE YEAR

In addition to managing temporary workers during plant outages, DTE uses the IPAA suite to re-validate the plant's regular population of 1,600 workers. The software helps ensure that all workers are correctly authorized to do their jobs. It coordinates background checks, behavior reviews, annual supervisor reviews, and other periodic checks. For example, an employee may be granted

access to the control room for a particular purpose. Once that task is fulfilled, that individual no longer needs that level of access. Ready2Work's activity-tracking features help DTE determine precisely what types of training they need to stay up-to-date with the latest regulations.

“I couldn't be happier with the product and the support that we receive from Curtiss-Wright,” Bomyea concludes. “Our processes are more efficient and accurate. Their software has enabled us to eliminate human errors and streamline regulatory activities. We have pretty much eliminated errors in reporting negative drug screens, in calculating workers backgrounds, and allowing work to be performed without the proper qualifications. Curtis-Wright really goes out of their way to understand the programs and ensure IPAA meets those needs.”