

Technology At Work

A Standard Industry Approach to Evaluating Workers

EPRI Guidelines for Supplemental Workforce Testing Gain Acceptance in the Nuclear Industry

By Matthew Hirsch

When nuclear power plant operators use supplemental workers during scheduled outages, they want them to be prepared for tasks such as rigging and lifting. When these workers require additional training upon arrival, higher labor costs result.

Beginning in the 1980s, EPRI investigated how to reduce these costs by assessing the knowledge, skills, and experience of the nuclear industry's temporary, mobile workforce. EPRI's Standardized Task Evaluation (STE) Program helps utilities identify and qualify workers by developing evaluations for industry-wide maintenance tasks. It supports a registry of more than 17,000 workers who have completed written and performance tests for specialized tasks.

More than 9,000 people in the registry have completed the written and performance tests for industrial rigging—more than any other task. More than 2,000 have completed tests for general valve maintenance.

Collaboration and Peer Review

For member utilities and workforce providers, the program provides a library of tests for evaluating supplemental workers' skills and knowledge.

EPRI convenes working groups of utilities and workforce providers to systematically develop evaluations. They analyze each task and create test banks that can be used to generate written exams and performance evaluations. These tools are peer reviewed by utility and workforce experts prior to their release.

"The collaboration among our utility members is a strength of this program, enabling us to create evaluations that are useful across the industry," said EPRI STE Program Coordinator Patty Wade.

To give utilities confidence that supplemental workers have been evaluated according to established standards such as training documents from the Institute of Nuclear Power Operations, EPRI developed the Administrative Protocol for Portable Practicals (AP3), a set of guidelines for workforce providers to follow for administering performance evaluations. AP3 compliance includes an EPRI-led team review of the workforce provider's program and a site visit to evaluate performance test administration. In some cases, compliance with AP3 can take six months to one year.

Savings for Utilities

Utilities can use EPRI's STE program to save significant time and money. Entergy's Fleet Maintenance and Technical Training Manager Jim Caery said that in an 18-month operating cycle, a two-unit nuclear power plant may spend \$150,000 to \$200,000 to train supplemental workers.

"We used to ask vendors to provide trained and qualified workers without specifying what 'trained and qualified' means," said Caery. "We were giving away free training."

To reduce these costs, Entergy has started to require workforce providers to comply with the AP3 guidelines to help confirm that supplemental workers bring to the job the necessary knowledge and skills.

According to Caery, the STE program could yield additional savings by expanding beyond maintenance and orientation training. “If we add training for health physics technicians, we cover the bulk of the supplemental workforce needed during refueling outages,” he said. EPRI is evaluating the program’s expansion into health physics and other areas.

The EPRI STE program continues to expand in the North American nuclear industry, with 19 utilities and 14 workforce vendors participating.

Key EPRI Technical Experts

Patty Wade, Heather Feldman