

EPRI's Standardized Task Evaluation (STE) Program



The Standardized Task Evaluations, which cover tasks performed by utility and supplemental workforce during outage work, include a task analysis and objectives, written test items, and performance (practical) evaluations. Over 80 tasks are available on www.epri.com. Additionally, in collaboration with the Institute of Nuclear Power Operations' National Academy for Nuclear Training e-Learning (NANTeL), EPRI has uploaded over 40 STE modules to NANTeL.

“We need good, qualified supplemental workers and we need to be able to determine that they’re qualified. The EPRI Standardized Task Evaluation program saves money and time by verifying that workers possess the knowledge and skills required to successfully perform tasks in a safe, efficient and reliable manner.”

—Archie Proffit, Program Manager, Fleet Maintenance, FirstEnergy (EPRI Success Story #1020755)



The Standardized Task Evaluation program can streamline qualification procedures, can improve the work quality, and can save time, money and effort for utilities and workforce providers.

Background

Qualified utility and supplemental personnel are critical to a plant’s ability to safely and effectively conduct maintenance tasks and help reduce the length of outages. EPRI’s Standardized Task Evaluation (STE) Program supports these efforts through a proven knowledge and skills evaluation process that ensures the competency of the industry’s craft and technician workforce. Program members include utilities and workforce providers.

Project Approach

Standardized task evaluations are used to ensure that the workforce is competent to reliably perform the many tasks associated with operating and maintaining industry facilities. The approach is predicated on the idea that there is no need to re-train experienced craft-persons for similar tasks at different plants. Rather, testing to validate previous training and experience provides assurance that a person will perform to high standards. Program implementation as described in EPRI Product 1025244 is achieved through: evaluations (written and practical), a national registry, and program administration industry standards.

Evaluations

Program participants continue to collaboratively develop evaluation tests that support high-priority industry needs. Each evaluation covers a specific task area, such as rigging or valve maintenance, and includes a written test to assess worker knowledge and a practical hands-on demonstration to verify worker skills. Over 80 evaluations have been developed within the STE Program and are available to program participants on www.epri.com. The current STE library is provided at the end of this brochure.

Program Administration Industry Standards

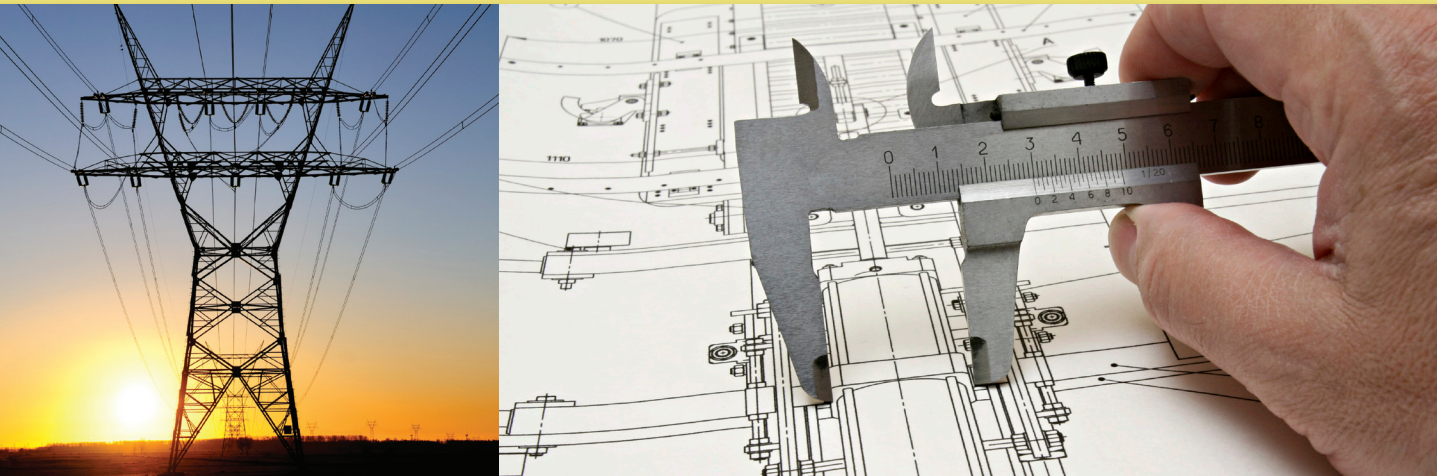
If station personnel can objectively validate that a supplemental worker has been trained and has demonstrated their ability to perform a specific task through an independent evaluation, the station may conclude that the individual meets the qualification requirements for that task at the station. The EPRI STE process provides a method to accomplish that objective validation.

EPRI’s Administration Protocol for Portable Practicals (AP3) (EPRI Product 1015074) was developed to evaluate workforce provider practices for administering EPRI’s STEs. This protocol reflects industry consensus standards for administering practical evaluations and participating workforce providers are eligible for a review of their training practices under this program.

National Registry

The results from the evaluations are documented in a national registry of personnel who have demonstrated competency in specific task areas.

Participating organizations have access to EPRI’s website which hosts the on-line registry. This registry documents the test results of workers who have completed a written and performance evaluation on a given task. Utilities and workforce provider organizations can use the registry to verify these results. Utilities may use those results to establish worker qualifications. Also, records of test results and worker qualification can also be input to the Nuclear Energy Institute’s Personnel Access Data System (PADS). As a result, workers who have passed their STE exam can arrive at a plant having demonstrated proficiency in performing specific maintenance tasks.



Benefits

- The availability of workers with previously completed STEs can free up training staff who would otherwise be needed to train and evaluate these supplemental personnel.
- Supplemental personnel can begin working more quickly, thus reducing lead time and resulting in additional efficiencies.
- Supplemental worker motivation can suffer when workers are required to sit through the same training many times as they move from station to station. The STE qualification process shows respect for workers' demonstrated abilities and can help in worker motivation.
- Nuclear plants often face challenges in securing qualified and proficient workers for outage work. By reducing the need for redundant training, the STE program can expand the pool of workers available to support more outages throughout the industry.
- Determining, through testing, that a worker's skills and knowledge match task requirements may result in improved performance during implementation of work activities. That in turn results in efficient completion of tasks with less likelihood of rework.

Library of STEs

**Items with an asterisk (*) are currently available on INPO's NANTeL System.*



Construction Electrician

Terminate low and medium voltage cables*

Diagnostic Testing

Perform air operated valve diagnostic testing*
Perform motor operated valve diagnostic testing*

Electrical Maintenance

Read electrical prints*
Clean and inspect electrical equipment
Use basic test equipment
Electrical safety for qualified worker*
Clean and maintain electrical cabinets, motor control center, load center and switchgear
Maintain molded case circuit breakers in motor control center applications
Maintain batteries*
Test and adjust auxiliary and time delay relays
Calibrate transducers and panel meters
Apply Raychem products*
Install Grayboot connectors*
Maintain low voltage terminations*
Maintain AC motors less than 100 horsepower
Adjust limitorque switches/verify proper operation
Perform periodic inspection of limitorque actuators
Limiterorque actuator refurbishment

I&C Maintenance

Read and interpret I&C drawings and publications
Perform electrical soldering
Fabricate, install and maintain tubing runs using single ferrule compression, double ferrule compression and flare fittings*
Calibrate general instrumentation
Maintain water chemistry instrumentation
Maintain air operated positioners*
Maintain air operated valve actuators
Maintain air operated valve accessories
Maintain plant security access control devices and systems.

Machinist

Operate lathe*
Operate milling machine
Operate surface grinder
Operate precision drill press

Mechanical Maintenance

Read mechanical drawings
General valve maintenance*
Maintain gate valves*
Maintain globe valves*
Maintain check valves*
Maintain diaphragm and 1/4 turn valves (ball, plug, butterfly)*
Advanced valve maintenance
Maintain control valves*
Maintain pressure seal valves*
Maintain control actuators
Maintain safety and relief valves*
Repack a valve
Maintain snubbers*
Align a shaft
Perform laser alignment*
Maintain positive displacement, rotary type pumps*
Maintain centrifugal pumps*
Maintain bearings*
Repack a pump*
Maintain air compressors*
Maintain drive couplings*
Maintain mechanical seals*
Maintain heat exchangers*
Maintain filters and strainers*
Use precision measuring and test equipment*
Maintain sightglasses*
Fabricate gaskets*

Pipefitter

Fabricate, modify and install flanged and un-flanged spools of threaded pipe*
Fabricate, modify and install flanged and un-flanged spools of welded piping systems

Radiation Protection

Work in a nuclear facility

Welder

Perform basic structural welding

Cross-Discipline

Perform administrative tasks (foreign material exclusion, start/finish a task, self-checking)
Perform confined space entry and attendance duties
Demonstrate industrial safety techniques (portable tool use/inspection, other OSHA training requirements)
Perform foreign material exclusion activities*
Install and torque fasteners
Perform standard rigging*
Perform advanced rigging for power lifts of heavy loads
Operate an overhead crane
Operate a forklift
Operate a mobile crane
Operate overhead/underhung hoists
Aerial work platforms*
Industrial rigging*
Perform signal person duties
Lift/land leads*
Erect and dismantle scaffolding*
Use fall protection*

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