Electronic Field Procedures

Background

Westinghouse Electric Company has decades of experience in developing and successfully deploying computerized procedure systems in Main Control Rooms of nuclear power plants throughout the world.

Electronic Field Procedures include many of the same features and tools of the computerized procedure system; converted onto a mobile tablet. The field use of this technology creates a portable, powerful tool for operations, maintenance and engineering personnel.

This technology enables excellence in three key areas:

- Human Performance
- Supervisory Oversight
- Continuous Improvement

Description

Electronic Field Procedures enable station personnel to overcome complex human performance challenges through the use of embedded human performance tools. Cost savings are realized through the elimination of cumbersome paper procedures/processes leading to increased field efficiency.

The Procedure Dashboard feature provides real-time status of all procedures in progress. Station Management can evaluate critical path activities and gain early insights on challenges. These elements can be utilized simultaneously to provide a proactive approach that helps minimize schedule delays and improves outage performance.

To enhance future field work, procedure analytics enable the platform to evaluate actual field performance data for meaningful post-work evaluations and the creation of effective continuous improvement initiatives.

Capturing dynamic field data using a mobile tablet
Benefits

- Embeds human performance tools that alert users of erroneous data or data that requires subsequent action
- Automates data collection to support work performance and component analytics
- Eliminates the need for paper procedures
- Leverages existing distributed information systems to support improved work performance execution
- Automates notifications and requests
- Uses standardized technology for conformance to site wireless and cyber security protocols

Key Features

- Supports site-specific styles/formats
- Timestamps and logs each step
- Monitors real-time status of procedures in progress
- Performance analytics compares planned durations versus actual
- Supports on demand access to relevant references and operating experience

Experience

Westinghouse has over 50 years of experience providing products and services to the global nuclear power plant fleet including a complete range of applications such as protection systems, control systems, information & monitoring systems and operator training simulators.