July 10, 2017

Efficiency Bulletin: 17-01
Portable Supplemental Radiation Protection Technician Training and Qualification

Eliminate site-specific qualifications of supplemental radiation protection technicians through development of a standard vendor training program.

Addressees: Chief nuclear officers, NEI APCs and INPO APCs

Issue: RP-12, Portable Supplemental Radiation Protection Technician Training and Qualification

Summary of Efficiency Opportunity

- Desired end-state—Prior to arrival on-site, supplemental radiation protection (RP) vendors will train and qualify their technicians using industry standard task list training criteria.

- Value proposition (vision of excellence)—This will eliminate on average the two to three days each site historically spends to qualify the supplemental RP technicians (SRPTs) prior to the start of an outage or project. Additionally, this will result in improved SRPT performance due to standardization of key radiation protection processes and procedures.

- Why is it important?—This initiative will reduce the recurring costs to train and qualify SRPTs while improving their performance.

- Industry benchmark value(s)—Industry CRE performance and the number of SRPT human performance errors remain constant.

- Measure of effectiveness—SRPT outage costs are reduced and SRPT human performance events remain constant or are reduced.
Relevant Standards

- Performance Objectives and Criteria (INPO) RP.1
- Performance Objectives and Criteria (INPO) RP.2
- Performance Objectives and Criteria (INPO) RP.3
- Performance Objectives and Criteria (INPO) RP.4
- Performance Objectives and Criteria (INPO) TR.1
- The Objectives and Criteria for Accreditation of Training Programs in the Nuclear Power Industry - ACAD 02-001 Rev 1: Objective 2, Criteria 2.5, “Personnel, including supplemental and non-plant personnel, satisfy established training and qualification requirements in support of working independently”

Relevant Regulatory Requirements

- UFSAR and technical specifications for ANSI-qualified RP technicians
- ANSI 3.1 and ANSI 18.1 (various depending on site-specific commitment)

Guidance

- INPO 05-008, “Radiological Protection at Nuclear Power Stations”
- INPO ACAD 93-008, “Guidelines for Training and Qualification of Radiological Protection Technicians”
- INPO ACAD 02-004, “Guidelines for the Training and Qualification Activities”
- NEI 03-04, Guidelines for Plant Access and Other Standardized Shared Training Courses and Evaluations
- Utilities, in conjunction with EPRI and RP technician vendors, will establish a common task list and training program for the supplemental RP technicians.
- Vendors will implement the training and qualification programs such that the technicians will arrive at a specific station qualified to complete these standard tasks.
- A working group comprised of utility, corporate and INPO radiation protection managers will develop common radiation protection procedures and processes to enable a common qualification process.
- An industry committee comprised of utility and corporate radiation protection managers and training managers will provide oversight of the vendor training programs. This will be accomplished by performing periodic program reviews using the ERPI Standardized Task Evaluation (STE) program (or a similar process) and monitoring SRPT performance using relevant industry indicators and ICES reports.

Recommended Industry Actions

- Develop the following standard training materials and functions:
  - supplemental radiation protection technician task list
  - training materials including task qualification tools using the EPRI STE or similar process
  - establish an industry process description for supplemental RP technician program
  - establish the periodic industry oversight committee.
- Develop the common industry procedures and processes for the following:
  - postings
  - radiological surveys
  - airborne surveys
  - alpha surveys
  - access control
  - job coverage
Revision 1

- common glossary
- free release process
- personnel decontamination
- radiography.

- Development of the common vendor training programs for the SRPT program.
- Establish a process to review and approve the vendor training programs.
- Key vendors to set up facilities.

**Change Management Considerations**

**Industry Activities**

- Industry webinar to provide background information associated with this initiative, discuss and clarify expectations, and address questions. Webinar information can be found at [https://web.inpo.org/Pages/Nuclear-Promise-Issues.aspx](https://web.inpo.org/Pages/Nuclear-Promise-Issues.aspx).
- Discussion at RPM meetings (INPO RPM working meeting and NEI RPM forum).
- Discussion on periodic RPM teleconference calls.

**Company Actions**

- Station RPMs to revise procedures to implement the common industry procedures and processes.
- Each site to develop a specific change management plan based on the changes required at the station or utility.
- Station communications to site personnel on the change.

**Guiderails**

- A periodic review of the vendor training program will be conducted, similar to a NUPIC audit, to ensure the programs are meeting the required standards.
- An industry oversight committee meeting will be conducted periodically (at least annually) to review outage performance and make recommended changes to the training programs.
- Station management observations of SRPT performance.
- SRPT performance and associated training are assessed during accreditation team visits.

**Report Your Site's Results**

Please report your company's implementation of this improvement opportunity, including the date of completion. Send this information along with your company point of contact to EfficiencyBulletin@NEI.org.

**Industry Contacts**

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- On the web: [www.nei.org/bulletin1701](http://www.nei.org/bulletin1701)

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**Key to Color Codes:**

- Red: NSIAC initiative – full participation required for viability
- Blue: Action expected at all sites, but is not needed for broad industry viability
- Green: Utility discretion to implement, consistent with its business environment

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