

efficiency bulletin

Dec. 2, 2016

Efficiency Bulletin: 16-32 Electronic Dosimeter Issuance for Visitors Requesting Radiologically Controlled Area Access

Visitors expected to receive less than 10 mrem during radiologically controlled area (RCA) entries will be monitored using only one form of dosimetry, the electronic dosimeter (ED).

Addressees: Chief nuclear officers, NEI APCs and INPO APCs

Issue: RP-21, Dosimeter Issuance for Visitors Requesting Radiologically Controlled Area (RCA) Access

Summary of Efficiency Opportunity

- Desired end-state—Visitors expected to receive less than 10 mrem during RCA entries are monitored for radiation via electronic dosimetry only. Visitors include personnel who desire tours or have a need to perform minor/approved activities within the RCA.
- Value proposition (vision of excellence)—This initiative will reduce administrative burdens and costs associated with thermoluminescent dosimeter (TLD) and optically stimulated luminescent dosimeter (OSLD) issuance and expedite the in-processing of visitors into the RCA.
- Why is it important?—Improve efficiency and reduce costs associated with visitor in-processing.
- Industry benchmark value(s)—An approximate 5 percent volume reduction in TLD or OSLD processing and increased in-processing efficiency for visitor tours, vendor representatives, evaluation teams, etc.

Color Code: BLUE
Due: March 2017

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- Measure of effectiveness—Achieving desired goals associated with reductions in TLD and OSLD processing and maintaining visitor doses below 10 mrem during site visits.

Relevant Standards

- NRC 10 CFR Part 20.1501
- NRC 10 CFR Part 19.12 "Instructions to Workers"
- Regulatory Guide 8.28 "Audible-Alarm Dosimeters" (August 1981)
- NRC HPPOS-328
- Performance Objectives and Criteria (INPO) RP.2, Radiation Dose Control

Guidance

- ANI Engineering Inspection Criteria: Section 8 Radiation Protection, Sub-section 8.4 External Dosimetry
- INPO 05-008, "Radiological Protection at Nuclear Power Stations"

Recommended Industry Actions

- NEI staff to discuss the bases and direction of this efficiency bulletin with the NRC.

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>.
- Discussion at industry radiation protection manager (RPM) meetings (INPO RPM working meeting and NEI RPM forum).
- Discussion on periodic RPM teleconference calls.

Company Actions

- Station RPMs to revise applicable dosimetry and in-processing procedures to support implementation of the new visitor dosimetry requirements.
- Determine if regulatory commitments require two independent forms of dosimetry.
- Enable RCA access control systems to allow entries without a primary dosimeter (TLD, OSLD, etc.).
- Each site to develop a specific change management plan to support implementation.
- Communicate the new visitor dosimetry requirements with site personnel. Establish a contingency process to determine visitor dose if the ED is lost or encounters problems (dose reconstruction).

Guidelines

- Use of single dosimeter monitoring (electronic dosimeters) is for visitors expected to receive less than 10 mrem during RCA entries.

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

- Visitors are not allowed access to locked high radiation areas.
- Visitors are not allowed access to high radiation or contaminated areas unless specifically authorized by the radiation protection manager.
- Visitors will be provided with either a 10 CFR 19.12 briefing or radiation worker training prior to electronic dosimetry issuance.
- Visitors (and escorts when assigned) are responsible for appropriate response to electronic dosimeter alarms.

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

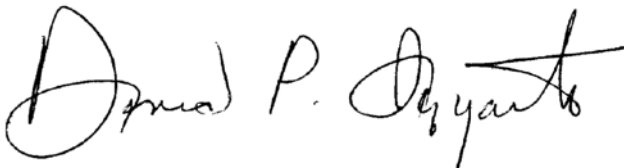
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