

efficiency bulletin

April 29, 2016

Color Code: Green

Efficiency Bulletin: 16-12

Graded Approach to Long-Term Dose Reduction Plan

A graded approach will be used for maintaining a long-term dose reduction plan, thereby balancing the level of effort required to meet goals with the performance level at a given station.

Addressees: Chief nuclear officers, NEI APCs and INPO APCs

Issue: RP-3, Performance-Based, Graded Approach to Long-Term Dose Reduction Plan

Summary of Efficiency Opportunity

- Desired end-state—A reduced level of effort will be needed to develop and maintain a collective radiation exposure (CRE) reduction plan for units that sustainably achieve industry performance goals.
- Value proposition (vision of excellence)—Site resources are available for higher-priority tasks. The industry reports approximately one full-time equivalent is committed to developing and maintaining the long-term dose reduction plan at each site.
- Why is it important?—The level of effort dedicated to reducing CRE should be proportional to the performance gap. Resources to maintain the plan at units that sustainably achieve the CRE industry performance goal will be reduced and available to focus on higher-risk activities.
- Industry benchmark value(s)—Unit CRE performance should meet or exceed industry goals.
- Measure of effectiveness—The number of units meeting the industry CRE performance goal remains the same or increases.



NUCLEAR ENERGY INSTITUTE

The Nuclear Energy Institute is the nuclear energy industry's policy organization.

This bulletin and additional information about nuclear energy are available at nei.org.

**1201 F Street, NW
Washington, DC 20004
NEI.org**

Relevant Standards

- Performance Objectives and Criteria (INPO) - RP.2, Individual dose and collective radiation dose are measured accurately and are maintained as low as reasonably achievable.

Relevant Regulatory Requirement

- 10CFR20, Standards for Protection Against Radiation.
- Regulatory Guide 8.8, Information to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable.
- Regulatory Guide 8.10, Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable.

Guidance

- Level 2 IER 11-1, Inadequate Collective Radiation Exposure Performance Improvements.
- INPO 05-008, "Guidelines for Radiological Protection at Nuclear Power Stations," was changed to read:

"Typically, a long-term dose reduction plan is developed for a five-year period. This plan includes the dose reduction items, analysis and expected results. A graded approach based on current dose performance may be used in order to determine the level of involvement required for the plan. For example, a unit exceeding industry performance goals for collective radiation exposure would be expected to have a more robust long-term dose reduction plan than a unit that has met the industry dose performance goal. In contrast, a unit that has met industry performance goals for two cycles would only be expected to maintain a list of dose reduction initiatives to sustain performance. This plan should be integrated with site processes such as the business plan, outage plans, and the corrective action program. Senior management reviews and approves scope changes, additions, and deletions to the long-term plan."

If industry CRE goals are met, the benefits of achieving additional dose reduction should be evaluated from a cost/benefit perspective; continuous pursuit of top-decile or top-quartile performance could be detrimental from a cost/benefit perspective and is therefore a decision that should be made based on utility/site priorities (utility discretion) and is not required.

Additionally, CRE from occasional activities to address nuclear safety concerns should not be included in determining sustained performance, if implemented using ALARA principles.

Recommended Industry Actions

- Review unit performance relative to industry performance goals.
- Revise applicable fleet/station documents.

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

Change Management Considerations

Industry Activities

- Industry webinar to provide background for initiative, to facilitate INPO and industry discussion, and to provide an open forum to clarify expectations and ask questions. Webinar information can be found at <https://web.inpo.org/Pages/Nuclear-Promise-Issues.aspx>
- Discuss at regional RPM meetings and routine industry conference calls.
- Update and discuss at 2016 RP manager meetings at INPO.

Company Actions

- Site/fleet RPMs revise governing documents.
- Sites evaluate the frequency that station ALARA committees review the long-term dose reduction plan based on performance.
- Corporate and sitewide communication on the initiative.

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

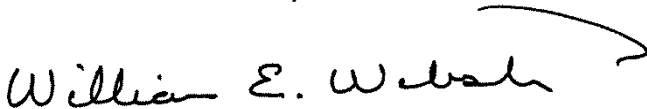
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