

Regulatory Guide Periodic Review

Regulatory Guide Number: **5.73**

Title: **Fatigue Management for Nuclear Power Plant Personnel**

Office/division/branch: **NRR/DRA/APHB**

Technical Lead: **Kamishan Martin**

Recommended Staff Action: **Revise**

1. What are the known technical or regulatory issues with the current version of the Regulatory Guide (RG)?

Regulatory Guide 5.73, "Fatigue Management for Nuclear Power Plant Personnel," published in March 2009, establishes the NRC's position for an acceptable approach to the requirements found in 10 CFR Part 26, Subpart I. The regulatory requirements were published March 2008. Subsequently, there was another expedited rule developed in July 2011 which gives licensees an additional option to address cumulative fatigue. Staff endorsed guidance published by industry on the implementation of this alternative method, NEI 06-11, (Revision 1), "Managing Personnel Fatigue at Nuclear Power Reactor Sites" (ADAMS Accession No. ML11199A094). The document provides information and describes methods specifically applicable to implementing the alternative method of managing cumulative fatigue. The NRC staff endorsed this addendum with a letter (ADAMS Accession Number ML11180A261). Other guidance which should be included is Enforcement Guidance Memorandum, (EGM) 09-008 concerning severe weather. Additionally, the staff has issued generic communications on how the industry should address fatigue management in specified cases of extreme weather and has provided clarification of acceptable practices in answers to frequently asked questions. All of which should be incorporated into a future revision

These changes are being addressed in a current rulemaking effort which also addresses recent petitions for rulemaking and the inclusion of more individuals (specifically quality verification personnel) into the purview of the rule provisions. These activities have created a need to update RG 5.73 to address the changes, additions, and clarifications in the guidance as well as aggregate the most recently endorsed industry developed guidance into one regulatory document.

2. What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?

Not updating the RG would affect supplemental inspection activities as warranted as well as infrequent instances where licensees may change their current program or request exemption from current rule provisions. It would also affect inspectors when determining findings that may be associated with the adequacy of licensee's fitness for duty fatigue management programs. There is no quantitative value that is finite or approximate that would represent the number of activities that happen on a periodic basis that can be provided to describe the impact.

3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contractor resources?

NRC staff requires approximately 1-2 FTE to complete documentation of the changes required for RG 5.73.

4. Based on the answers to the questions above, what is the staff action for this guide (Reviewed with no issues identified, Reviewed with issues identified for future consideration, Revise, or Withdraw)

Revise.

5. Provide a conceptual plan and timeframe to address the issues identified during the review.

The NRC currently plans to revise RG 5.73 concurrently with the rule making effort presently underway. The staff is working with the industry on developments to NEI 06-11 and the subsequent endorsement of that document through the necessary revisions to 5.73. The final rulemaking is scheduled for completion in 2016.

NOTE: This review was conducted in August 2014 and reflects the staff's plans as of that date. These plans are tentative and subject to change.