



NUCLEAR ENERGY INSTITUTE

**Jack W. Roe**  
DIRECTOR  
OPERATIONS SUPPORT  
NUCLEAR GENERATION DIVISION

January 14, 2008

NRC Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** 10 CFR Part 26, Definition of Maintenance

**Project Number: 689**

On December 13, 2007, during a public meeting discussing the implementation guidance for 10 CFR Part 26, Subpart I, "Managing Fatigue," the NRC presented a definition of the term maintenance. The Nuclear Energy Institute (NEI)<sup>1</sup> appreciates the opportunity to comment on this definition.

The following is the NRC proposed definition of the term maintenance:

Maintenance means, for the purposes of § 26.4(a)(4), (1) preventive maintenance, including, but not limited to, periodic or condition-based cleaning of critical parts, adjustment, alignment, calibration, lubrication, and routine periodic or condition-based replacement or refurbishment of renewable or consumable parts or components; (2) corrective maintenance, including, but not limited to, actions directly to repair or restore SSCs, or the installation of modifications to SSCs; and (3) testing and inspection, including surveillances, in-service testing and inspection, and post-maintenance testing or other actions to monitor the performance or condition of SSCs. Examples of performance and condition monitoring include, but are not limited to, thermography, vibration monitoring, insulation testing, lubricant analysis, and erosion and corrosion control measures. Maintenance does not mean activities or evolutions by licensed or non-licensed plant operators to:

---

<sup>1</sup> The Nuclear Energy Institute (NEI) is the organization responsible for establishing unified policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear materials licensees, and other organizations and entities involved in the nuclear energy industry.

(1) prepare or align systems and components before and/or in support of maintenance activities (including, but not limited to, valve and switch lineups, clearances, isolation, depressurization, draining, deenergization, and system reconfiguration); (2) restore, realign or test those systems or components for normal operation upon the completion of the maintenance activities; or (3) conduct surveillances. Maintenance also does not mean independent quality control/verification checks under the licensee's NRC-approved Quality Assurance Program."

Staff Requirements Memorandum (SRM) of April 17, 2007 on SECY-06-0244, Final Rulemaking – 10 CFR Part 26 – Fitness-for-Duty Programs directed that a definition of maintenance be added to the rule. The recommendation for this requirement is recorded in Commissioner Lyons vote sheet where Commissioner Lyons stated, "In addition, the staff should include in § 26.5 Definitions an appropriate definition of 'maintenance' reasonably consistent with the NRC's existing guidelines in Generic Letter 83-14." We understand that the intent of the definition was to use a definition that had been used and was understood by the industry.

The NRC staff's proposed definition is not reasonably consistent with this intent as it proposes a significant expansion of the scope of personnel and activities that would be included as key maintenance personnel and maintenance activities. This expansion could include maintenance, chemistry, and engineering personnel who perform activities associated with monitoring equipment health. While important to the utilities, these activities are passive or non-intrusive and do not have the ability to cause a change in state of the equipment.

Generic Letter 83-14 defines "key maintenance personnel" as follows:

"Key maintenance personnel are those personnel who are responsible for the correct performance of maintenance, repair, modification or calibration of safety-related structures, systems or components, and who are personnel performing or immediately supervising the performance of such activities."

The rule is applicable to individuals "Performing maintenance or on-site directing of the maintenance of structures, systems, and components (SSCs) that a risk-informed evaluation process has shown to be significant to public health and safety." The focus of this statement is risk and public health and safety. The term maintenance should identify those activities that are intrusive, that have the ability to actively change the equipment state and could have consequences to safety related equipment, should an error due to fatigue occur. Therefore, we suggest that the following definition of maintenance be endorsed by the NRC staff for the applicability of work hour limitations:

"Maintenance means, for the purposes of § 26.4(a)(4) defined as maintenance activities, repair, modification or calibration, that are intrusive to structures, systems or components (SSCs) and where errors could produce consequences to safety related SSCs."

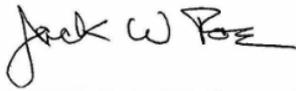
NRC Document Control Desk

January 14, 2008

Page 3

If you have any questions, please contact me at (202) 739-8138; [jwr@nei.org](mailto:jwr@nei.org) or Russell Smith at (202) 739-8058; [ras@nei.org](mailto:ras@nei.org).

Sincerely,

A handwritten signature in black ink that reads "Jack W. Roe". The signature is written in a cursive style with a horizontal line at the end.

Jack W. Roe

c: Mr. David T. Diec, NRC  
Dr. David R. Desaulniers, NRC  
Dr. Valerie E. Barnes, NRC