

January 10, 2008

MEMORANDUM TO: John D. Monninger, Deputy Director  
Division of Risk Analysis  
Office of Nuclear Regulatory Research

THRU: Jose G. Ibarra, Branch Chief */RA/*  
Human Factors and Reliability Branch  
Division of Risk Analysis  
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Office of Nuclear Regulatory Research

SUBJECT: MEETING WITH THE PUBLIC ON DECEMBER 13, 2007, TO  
DISCUSS IMPLEMENTATION GUIDANCE FOR SUBPART I OF  
THE PART 26 FITNESS-FOR-DUTY PROGRAMS

Enclosed is the meeting summary for the December 13, 2007, stakeholder meeting on NEI's draft implementation guidance, NEI-06-11, Revision A, "Managing Fatigue at Power Reactor Sites." This guidance is intended to support implementation of Subpart I, "Managing Fatigue," of 10 CFR 26, "Fitness-for-Duty Programs." The meeting participants included U.S. Nuclear Regulatory Commission (NRC) staff and contractors, members of the power reactor licensee community, representatives from the Nuclear Energy Institute (NEI), and a member of the Professional Reactor Operator Society (PROS).

The focus of the meeting was the discussion of NEI's changes to the draft guidance since the August 1, 2007, stakeholder meeting and staff comments. This guidance is intended for endorsement by the NRC through a Regulatory Guide to be prepared when the NEI guidance is finalized.

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(301) 415-6946

Enclosures: 1. Meeting Summary  
2. Meeting Attendance List

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DATE	01/9/08		01/9/08	01/10/08

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**Summary of December 13, 2007, Public Meeting Regarding  
NEI 06-011 [Revision A],  
Implementation Guidance for Subpart I of 10 CFR Part 26**

On December 13, 2007, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting regarding the development of implementation guidance for Subpart I, "Managing Fatigue," of 10 CFR Part 26, "Fitness-for-Duty Programs." The draft implementation guidance is in NEI-06-11, Revision A, "Managing Fatigue at Power Reactor Sites." The meeting participants included U.S. Nuclear Regulatory Commission (NRC) staff and contractors, members of the power reactor licensee community, representatives from the Nuclear Energy Institute (NEI), and a member of the Professional Reactor Operator Society (PROS). The purpose of this meeting was to further discuss draft NEI implementation guidance for Subpart I.

The meeting was noticed on November 26, 2007. The notice is available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. The public can access the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents, including the meeting notice, and agenda, which may be found in ADAMS under accession number ML073300376. NEI-06-11, Revision A, "Managing Fatigue at Power Reactor Sites," may be found in ADAMS under accession number ML073300391.

A list of the meeting attendees is included in Enclosure 2.

The meeting began with a general discussion of the current status of the Fitness-for-Duty (FFD) rulemaking. The remainder of the meeting consisted of a discussion, led by NRC and NEI representatives of the revised NEI guidance document. Many issues were raised and discussed in detail. The following summarizes the discussion of comments and future actions.

1. Significant Meeting Items

- **Applicability of Work Hour Requirements: Transition From Construction to Operation**

Industry representatives and the NRC staff participated in a discussion of when the applicability of the work hour requirements of Subpart I begin (i.e., when the rule takes effect) for maintenance workers. The rule employs a risk-informed approach for determining who is subject to work hour controls. NEI stated that an SSC only can be determined as risk-significant once the plant has achieved initial criticality and there are potential radiological consequences. Thus, NEI concluded that initial criticality should signal the beginning of the applicability of the work hour requirements for these individuals. NEI asserted that this starting point is allowed by the rule language and would be consistent among plants.

The NRC staff indicated that the NEI interpretation of risk-informed language in Section 26.4(a) to establish timing of implementation is not appropriate and that Section 26.3(a) establishes timing of implementation. The staff indicated that they would consider this issue further.

- Applicability of Work Hour Requirements: Maintenance of Risk-Important SSCs

NEI also discussed their proposed guidance that would interpret the rule to permit excluding from work hour controls maintenance on components that were removed from a system but were being maintained on-site (e.g., refurbishing a pump in a maintenance shop). NEI asserted that if the component is removed from a system, then it is not risk-significant and maintenance of the component is not subject to work hour controls. The NRC staff also asked for NEI's position regarding whether the work hour requirements would apply to work on a component that is being repaired in-place. NEI responded that if the component is installed, then the work is covered (assuming initial criticality), even if the equipment is de-energized or isolated. The staff indicated that the potential for worker errors from fatigue is not dependent upon whether maintenance is performed on a component in-place, or another on-site location. In either location, the potential for fatigue to cause errors is present.

- Definition of "Maintenance"

The definition of "maintenance" included in NEI 06-11 differs from the definition of this term in the FFD rule. NEI expressed the position that the NRC's definition in the final rule is outside the direction of the May 2007 Staff Requirements Memo (SRM) and would require renoticing. The SRM stated that the NRC staff should include "an appropriate definition of 'maintenance' reasonably consistent with the NRC's existing guidelines in Generic Letter 83-14." NEI indicated that the rule definition is an expansion of the definition in the generic letter and broadens the scope of the rule. NEI specified some terms within the NRC's definition to which it objected, including "cleaning of critical parts," "testing and inspection," and "other actions to monitor the performance and condition." The NRC staff stated that prior to revising the definition, the NRC must better understand which maintenance activities NEI believes are not appropriate for work hour controls. An NEI representative stated that NEI would send written comments, and the NRC staff agreed to consider this issue further.

- Work Hours Scheduling

The NRC staff noted that § 26.205(c) was intended to be a performance-based requirement and that NEI should provide guidance for licensees to establish criteria for work scheduling and to assess their performance in adhering to these schedules and preventing impairment from fatigue. NEI asserted that a performance-based interpretation of § 26.205(c) was not necessary but agreed to further consider the staff's comments.

- Transitioning Into/Out of an Outage

Industry representatives and the NRC staff discussed how workers at multi-unit sites could transition between an operating unit and a unit that is in an outage. NEI stated their position that all workers at a site may work outage hours (even if working on the operating unit) because they all are supporting the outage effort, either directly or indirectly. NEI expressed a concern that the NRC staff is reverting back to the "solely" requirement that licensees segregate work forces during an outage.

The NRC staff noted that the rule establishes more stringent requirements for operating units with the objective of ensuring that individuals are fit for maintaining the safety of the operating unit (e.g., capable of safely and competently responding to an event affecting the operating unit). The NRC staff proposed development of guidance that would allow individuals to safely transition from working on an outage unit to work on an operating unit but noted that the staff did not interpret the rule or understand the Commission's intent as allowing outage work hour controls for personnel working on operating units.

Both NEI representatives and the NRC staff agreed to discuss this issue further with their respective managements. An NEI representative noted that this is a time-sensitive issue because an interpretation of the rule that required training additional operators would compromise the 18-month implementation period.

## 2. Additional meeting items addressed by stakeholders

- Implementation

NEI expressed concern that the NRC was considering accelerating the implementation schedule for the work hour controls applicable to security personnel. The staff noted that the subject of the meeting was the guidance development for the rule and that there is currently no intent to change the implementation schedule for the rule.

- Directing

The NRC staff commented that introducing the concept of "advising" into NEI's guidance concerning the term "directing" may add more ambiguity than clarity to the guidance. An NEI representative responded that NEI included "advising" to show the distinction between "advising" and other functions. NRC expressed the need for further clarification on the distinction between "directing" and "advising."

- Periodic Overtime

The NRC staff stated that this section may not be necessary since the rule allows overtime as long as it is within the set limits. An NEI representative indicated that NEI sought to provide some guidance on overtime, both for the industry and for enforcement personnel, in order to keep a level of consistency. NEI agreed to add clarification to this section.

- Transitioning Onto a Shift

NEI stated that the FFD rule specifies "shift," so the rule's fatigue requirements would not apply to non-shift workers, which NEI interpreted to mean day-workers and salaried workers. The NRC staff objected to the suggestion that the rule's references to "shifts" exclude workers, work hours, or work days if associated with salaried work or day-time work.

In addition, the NRC staff stated that the guidance in this section should address appropriate look-back periods for minimum day-off requirements for individuals beginning or resuming duties subject to work hour controls. NEI agreed to further develop the guidance for this issue.

- Unexpected Outages

NEI stated that unexpected outages can truncate the averaging period for calculating the average number of days off and inadvertently cause noncompliance with the rule for the non-outage period despite a reasonable schedule. The NRC staff noted that the NEI guidance appeared to provide a reasonable means of addressing these circumstances.

- Resets from Deviation

NEI stated that it included this section of the guidance to address how to restore an individual's compliance with the rule after he or she was out of compliance. NEI added this section for regulatory and enforcement stability. The NRC staff acknowledged the intent of the section, but stated that the guidance should include the minimum day-off requirements of § 26.205(d)(3). NEI agreed to take this into consideration.

- Call-in Work Period

NEI proposed guidance for circumstances in which an individual is called in to work an unplanned work period without the minimum 10-hour break required by the rule. The staff objected to the guidance but noted that an individual could return to work without the minimum 10-hour break if the licensee treated the individual's shift and the unscheduled work period as a single work period (i.e., for purposes of compliance with the work hour limits and break requirements, calculate the individual's hours worked as the time from the beginning of the shift to the end of the unscheduled work period). If a licensee chooses not to treat the shift and unscheduled work period as a single work period, a waiver of the minimum break requirement would be necessary. NEI agreed to take the NRC staff's comment into consideration.

- Work Hour Controls During Outages

The NRC staff stated that this section should include discussion of the minimum day-off requirements of § 26.205(d)(3), and NEI agreed to revise this section in that regard.

With regard to staffing (travelers within the same company), NEI asked if it would be adequate to rely on documented statements made by an individual in order to avoid a delay due to a transfer of records. The NRC staff stated that they will look into this issue.

- NEI agreed to add clarification and guidance to the following guidance sections

- Section 10, "Disciplinary Actions"
- Section 12, "Fatigue Assessments"
- Section 15, "Reviews."

**December 13, 2007, Public Meeting to Discuss Implementation Guidance for Subpart I to 10 CFR Part 26**

Attendance List

<b>NAME</b>	<b>AFFILIATION</b>
J. Persensky	NRC
David Desaulniers	NRC
David Diec	NRC
Niav Hughes	NRC
Steve Alexander	NRC
Kamishan Martin	NRC
Jack Roe	NEI
Greg Boerschig	Exelon
Brian McCabe	Progress Energy
Al Lindsay	Duke Energy
Ted Koser	STARS
Russel Smith	NEI
Ted Vogt	Southern California Edison
C.T. Baucom	Progress Energy
Michael Priebe	Nuclear Management Company
James Gallman	Luminant
Kristi Branch	PNNL
Robert McNiel	STPNOC
Mike Bryce	FPL
Mike O'Keefe	FPL
John E. Lines	PPL Susquehanna
Sandra K. Lines	PPL Susquehanna
Michelle Yun	Exelon
Kevin Kingsley	Entergy
Greg Halnon	First Energy
Bob Waselus	SCE&G
Mark Giacini	CEG
Peter Fowler	Duke Energy
Billie Rooks	Southern Nuclear
Robert Meyer	PROS
Karen Aikens	D.C. Cook
John Collier	ICF
Georgia Schuh	ICF