

April 20, 2006

MEMORANDUM TO: Eileen M. McKenna, Chief
Financial, Policy and Rulemaking Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Joseph L. Birmingham, Project Manager */RA/*
Financial, Policy and Rulemaking Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: PUBLIC MEETING ON NRC CONCEPTS TO RESOLVE PUBLIC
COMMENT ON PROPOSED PART 26 RULE PUBLISHED IN FEDERAL
REGISTER (70 FR 50442)

The Nuclear Regulatory Commission (NRC) held a two-day public meeting, March 29-30, 2006, at NRC headquarters to discuss alternative concepts for the proposed rule to amend Part 26 on Fitness-for-Duty (FFD) Programs. The staff presented alternative concepts for the applicability of drug, alcohol, and Access Authorization (AA) requirements for construction activities by Combined Operating License (COL) licensees and for certain fatigue management requirements. The proposed rule was published in the Federal Register August 26, 2005 (70 FR 50442). The meeting notice was published in the Federal Register, March 17, 2006 (ADAMS Accession No. ML060650535). The meeting notice provides extensive background information and a detailed agenda of the information to be discussed during the meeting. A list of those attending the meeting is provided in Enclosure 1 to this memorandum. The NRC presentation material is provided in Enclosure 2 (ADAMS Accession No. ML060890298).

Approximately 100 representatives from nuclear power plant licensees, nuclear power companies, the Nuclear Energy Institute, Union of Concerned Scientists, the Professional Reactor Operators Society, International Brotherhood of Electrical Workers (IBEW), vendors, media, and NRC staff attended the two day meeting.

Industry began its participation by stating that nuclear power plant construction sites should be regulated on the basis of industrial safety considerations rather than public health and safety or the common defense and security and that full FFD programs were unnecessary. This opinion was based primarily on the proposal that, prior to receipt of fuel onsite, there was no imminent threat to public health and safety from a radiological release. Industry pointed out that it typically imposed controls on construction workers and activities to ensure a relatively drug and alcohol free worksite but that those controls were primarily economic measures to ensure quality of work and cost controls. Industry did not believe that regulation by the NRC was warranted at this stage as there was no possibility of a radiological release.

The NRC staff responded that FFD and AA requirements were needed to ensure a drug and alcohol free work environment that would promote quality of work and address worker reliability

concerns for potential sabotage. The staff believes that implementing AA requirements will help reduce the potential for a terrorist to introduce latent defects during construction that could later result in challenges to the safe operation of the facility. Those requirements would also reduce the potential for a terrorist to obtain important design or safety information that could assist in implementing adverse attacks on the plant at a later time. Rather than the FFD program in the proposed rule, the staff was proposing a “modified” FFD and AA program that would apply to personnel who have unescorted access to the construction site. Those workers who worked five days or fewer in any one-year period would not be subject to the FFD program, but would require an escort at all times when on site.

Under the modified program, workers who have unescorted access would not need to participate in FFD training nor random drug and alcohol testing. Instead they would be subject to pre-access drug and alcohol testing and a security screening. In lieu of random testing, there would be greater reliance on “behavioral observation” by supervisors. Certain workers with unescorted access would have to participate in the full FFD program, including construction supervisors, those who serve as escorts for site visitors, security personnel, and quality assurance or quality control auditors.

Industry pointed out that there are existing programs, inspections, and tests, such as those required by Appendix B, to detect construction flaws whether accidental or deliberate. Further, industry stated that the concern for control of design and safety information was a security concern which should not be addressed by Part 26 under FFD. NEI said it is working with the industry on an appendix to the NEI security document NEI 03-12 to lay out security requirements at construction sites before fuel arrives on site. Concerns for worker reliability and backgrounds were being addressed by the proposed Appendix E to NEI 03-12.

In response to stakeholder comments on the proposed fatigue management provisions, the NRC staff developed an alternative to the requirement to provide at least one 24-hour break in any seven-day period, one 48-hour break in any 14-day period, and collective work hour limits. The alternate concept would require (1) a minimum 36-hour break in any nine-day period and (2) while the plant was operating, a minimum number of “days off” each shift cycle. The minimum number of days off would depend on the length of the work shift. Each individual working an eight-hour shift schedule would have, on average, a minimum of one 24-hour break per week. Those individuals working a 10-hour shifts would each have, on average, two 24-hour breaks per week, and each individual working a 12-hour shift would each have, on average, at least three 24-hour breaks per week. The breaks would be averaged over a shift cycle. Therefore, any given week in the shift cycle may have more or fewer breaks than the minimum weekly average. Details and examples of how these requirements could be implemented are presented in slides 21-30 of Enclosure 2.

The staff also presented alternative concepts for work hour requirements for outages. During an outage, the staff proposed allowing a change in the formula for required break periods. During the first 60 days of a plant outage, workers would be required to take at least three “days off” in each successive 15-day period. However, during an outage or increased threat situation, security personnel would have to take at least four days off in each successive 15-period during the first 60 days the plant was shut down. Beginning on day 61, the requirements would revert back to those for an operating plant with some exceptions. Details and examples of how these requirements could be implemented are given in slides 32-37 of Enclosure 2

During the discussion on fatigue, comments generally in support of having work-hour controls were heard from individuals as well as from professional organizations and worker unions. Additionally, several comments were provided by an expert on sleep requirements that controls were needed because worker error rates increase as fatigue increases. The industry response to the staff's alternative concepts centered around changing the minimum 36-hour break in any nine-day period to a 34-hour break and requiring that workers on a 12-hour shift have a minimum of two rather than three 24-hour breaks per week. Industry said that these changes were needed to provide flexibility to compensate for occasional worker unavailability. For outage periods industry asserted that one day off per week was sufficient to prevent cumulative fatigue. Industry asked to see the rule language in order to be able to provide specific comments on the proposal

On the last day of the meeting, the staff discussed the development of fatigue management implementing guidance. An outline of the guidance needed and the process proposed for developing the guidance is contained in slides 46-54 of Enclosure 2. In general, the discussion addressed the following items:

- Process for development of guidance
- NEI proposed guidance
- Stakeholder recommendations for specific guidance topics

The discussion on development of implementing guidance was beneficial to staff and industry in furthering the process and for obtaining stakeholder input. The staff will be considering comments received through the meeting in the preparation of a notice requesting public comment on the alternative concepts.

Enclosures: As stated

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Enclosures: As stated

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*via email

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DATE	04/ 18 /2006	04/ 17 /2006	04/ 19 /2006	04/ 20 /2006

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**List of Attendees for March 29-30, 2006
Meeting on FFD, Fatigue, and Access Authorization for Part 26**

<u>NAME</u>	<u>ORGANIZATION</u>
Chris Grimes	NRC/NRR
Garmon West	NRC/NSIR
James Canady	NRC/NSIR
Eric Skarpac	NRC/NSIR
Eric Lee	NRC/NSIR
Brian Richter	NRC/NRR
David Desaulniers	NRC/NRR
David Diec	NRC/NRR
Joseph Birmingham	NRC/NRR
Eileen McKenna	NRC/NRR
Russel Barnes	NRC/NSIR
Jay Persensky	NRC/RES
Valerie Barnes	NRC/RES
Martin Kamishan	NRC/NRR
Baxter Bradley	NRC/NSIR
Molly Keefe	NRC/RES
Garry Armstrong	NRC/NRR
Marjorie Rothschild	NRC/OGC
Tina Ghosh	NRC/NMSS
Doug Huyck	NRC/NSIR
David Lochbaum	UCS
Mark Findley	SCE&G
James Fisicaro	NEI
Mark Wetterhahn	Winston & Strawn
Robert Kelm	NEI
Barry Quigley	Self
Nelson Martin	Dominion
Rich Goodrich	TVA
John Giddens	Southern Nuclear
John Rycyna	NEI
Chris Earls	NEI
David Blakeney	Progress Energy
Peter Fowler	Duke Energy
Terry Silverberg	NMC
Craig Dean	ICF Consulting
Nick DiPietro	First Energy
Judy Wasieczleio	SCE&G
Daniel Bouthron	FPL
Richard Bucher	Self
Brian Zaleski	ICF
John Fee	SCE
John Collier	ICF
David Littell	EPRI
Chiquita Collins	NSIR
Deann Raleigh	LIS Scientech
Jenny Weil	McGraw Hill
Alan Beard	GE Nuclear

**List of Attendees for March 29-30, 2006 (Cont.)
Meeting on FFD, Fatigue, and Access Authorization for Part 26**

<u>NAME</u>	<u>ORGANIZATION</u>
James Davis	NEI
Gregory Dunn	FENOC
Robert Waselus	SCE&G
Garry Lewton	Patriot News
Anthony Rizzo	POGO
R. Stockton	POGO
Catherine Tyler	Winston & Strawn
Michael Coyne	NEI
JoAnn Spurber	NEI
Ed Brenner	Dominion
Darrel Droblich	National Sleep Foundation
Jim Gallman	TXU
Jerome A Ranalli	Areva
Chris Kelley	Entergy
Ronald Casey	Entergy
Lauren Fleishman	ISL
Daniel Black	Duke
Jerry Sims	Southern Co.
Rick Hill	Erin Eng.
Mark Giacini	Constellation Energy
Don Glassic	PPL
John McLean	Sargent & Lundy
John Haugh	EPRI
Glenn Wilson	Dominion
Rebecca Stanfield	TVA
Peter DeFilippi	Westinghouse
Georgia Schuh	ICF Consulting
Dana Millar	Entergy
Tom Nauman	Shaw Stone & Webster
Sandra Lines	PPL
Brian McCabe	Progress Energy
Susan Techan	Exelon
Tom Harken	TVA
G. Belenky	WSU
Todd Newkirk	IBEW
John Lines	PP&L
Robert Waselus	SCE&G
Bruce Mrowca	ISL
Jack Roe	NEI
Peter Frulen	Duke Energy
Sherry Eckert	Constellation
David Ziebell	EPRI

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