



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 17, 2007

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-06-0244

TITLE: FINAL RULEMAKING--10 CFR PART 26 –
FITNESS-FOR-DUTY PROGRAMS

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of April 17, 2007.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in black ink, reading "Annette L. Vietti-Cook".

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Klein
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons
OGC
EDO
PDR

VOTING SUMMARY - SECY-06-0244

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	X				X	3/20/07
COMR. McGAFFIGAN	X				X	3/27/07
COMR. MERRIFIELD	X				X	2/21/07
COMR. JACZKO	X				X	3/22/07
COMR. LYONS	X				X	2/5/07

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on April 17, 2007.

AFFIRMATION ITEM

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: CHAIRMAN KLEIN
SUBJECT: **SECY-06-0244 - FINAL RULEMAKING-10 CFR PART
26-FITNESS-FOR-DUTY PROGRAMS**

Approved xx Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached xx None _____



SIGNATURE

3/20/07

DATE

Entered on "STARS" Yes No _____

**Chairman Klein's Comments on SECY-06-0244,
"Final Rulemaking – 10 CFR Part 26 – Fitness-for-Duty Programs"**

I approve the staff's recommendation to publish in the *Federal Register* the notice of final rulemaking to update 10 CFR Part 26, "Fitness-for-Duty Programs," subject to the changes and comments below. I commend the staff for their extraordinary effort and dedication to bring this rulemaking to closure.

Work Hour Control – Support for Modified Minimum Days Off Requirements

I support requiring minimum days off to help nuclear plant personnel to mitigate and prevent cumulative fatigue. After carefully considering the views expressed by the staff, the industry, and other external stakeholders, however, I prefer fewer minimal days off for various shifts and plant conditions than those proposed in the draft rule.

The staff has asserted that the work hour limits and the break requirements alone would not adequately address the prevention of cumulative fatigue. The staff referenced the two "most comprehensive documents" on worker fatigue at nuclear power plants: (1) Electric Power Research Institute (EPRI) NP-6748, "Control Room Operator Alertness and Performance in Nuclear Power Plants," and (2) NUREG/CR-4248, "Recommendations for NRC Policy on Shift Scheduling and Overtime at Nuclear Power Plants." The two guidelines recommended that NRC authorize no more than 400 hours per year of overtime as an individual limit, which translates to an average work week of 48 hours. Surveys conducted by the Professional Reactor Operator Society and EPRI indicated that the majority of the operators preferred tolerance of annual overtime of about 350 to 400 hours. Work hour data collected by NEI showed that average annual overtime for licensed operators was 375 hours. The staff indicated that these recommendations and preferences suggest that a maximum average work week should be no more than 48 hours, and based the proposed days off requirements for various work-hour shifts (and roles) to limit the average maximum weekly work hours to between 48 and 54 hours.

The industry disputed the need for the minimum days off requirement, contending that a 34-hour break in any 9-day period would sufficiently address cumulative fatigue. This argument is based on the Department of Transportation (DOT) / Federal Motor Carrier Safety Association (FMCSA)'s 34-hour break provision for commercial motor vehicle operators in their August 25, 2005 published rule. DOT's 34-hour break allows restart of a 60-hour clock, the maximum driving hour limit in 7 days (or 70-hour limit in 8 days), because two 8-hour sleep periods afforded by a 34-hour break would give drivers an opportunity to minimize both acute and cumulative fatigue.

The staff countered the industry claim by referring to the view of the expert panel established for the DOT rule that optimal recovery occurs where there are two consecutive 8-hour sleep periods that include the hours between midnight and 6 A.M. and that the 34-hour recovery period affords only the day time drivers two nights of sleep recovery to "sufficiently enable them to eliminate or 'zero out' any cumulative fatigue that may occur over several days." The night time drivers, which account for about 22 percent of the commercial vehicle drivers, would not acquire such restorative sleep since they would not be afforded two night time sleep opportunities. Because of the limited scientific evidence associated with the 34-hour provision, DOT even considered implementing a restart period of 44 hours since it would give nighttime drivers an opportunity to be off duty for two nighttime periods. However, in the end DOT determined that a 44-hour period could create more problems than benefits because it would

cause the drivers' shift to rotate, negatively impacting their schedule and their circadian cycle – a similar impact that a number of external commenters indicated would occur if the 48-hour break, proposed in the proposed rule, were adopted. In the end, DOT concluded with tepid endorsement that the 34-hour provision still allows for two 8-hour sleep periods, though not ideal for night time drivers, and gives drivers an opportunity to help minimize both acute and cumulative fatigue, regardless of their driving schedule.

As evidenced by DOT's experience, I believe that there is no unequivocal scientific basis to support the claim that a 34-hour break in 9 days would eliminate or "zero out" cumulative fatigue for all of the affected plant personnel. Due to this uncertainty, I believe that the proposed "34-9" break requirement needs to be buttressed by minimum days off requirements to ensure that cumulative fatigue is appropriately accounted for by the work hour control requirements for nuclear power plant workers.

Another reason for supporting the concept of days off requirements has its roots in the 25-year old NRC policy related to fatigue management. NEI's proposal to delete the minimum days off requirements would make the 72-hour limit in 7 days to be the limiting requirement for those workers on the 12-hour shifts. This limit has existed since the issuance of Generic Letter 82-12, "Nuclear Power Plant Staff Working Hours" but only as a guideline – in case the 40-hour work week needs to be exceeded "on a temporary basis" due to "unforeseen problems requiring overtime, or during extended periods of shutdown for refueling, major maintenance or major plant modifications." However, contrary to the intent of this policy, deviations and waivers have been authorized indiscriminately for years, in part, because the policy lacked enforceability. The intent of the generic letter was not just to prevent exceeding such an upper limit, but also to prevent the work hours from reaching, or even nearing, the limit on a regular basis. If the minimum days off requirements are excluded from the final rule, with daily and weekly upper limits as the sole work hour controls (for 12-hour shifts), there is no way of assuring that nearing or exceeding such upper limits do not become de facto routine practice.

For these reasons, I favor the concept of requiring minimum days off. However, I believe that only 2 days off per week, averaged over a 6-week shift cycle, should be required for those who work the 12-hour shifts during the plant's normal operating conditions. The 2 days off would allow for 2 continuous night time sleep periods for the night shift workers that the "34-9" break requirement alone would not. Consistent with DOT's findings, this time period should provide sufficient opportunity to mitigate or prevent cumulative fatigue. Even if the 2 days off are not taken back to back, the additional number of days off per week (compared to no minimum days off requirement) would provide more frequent opportunities in a given week to mitigate cumulative fatigue. This requirement would allow the maximum average work week to be about 56 hours for reactor operators and about 60 hours for others listed in § 26.4 (a)(2) through (a)(4). Thus, the average of 2 days off per week requirement would provide sufficient overtime opportunities for those who desire it, but it would also provide regulatory control to prevent routine use of excessive overtime hours that push toward the 72-hour limit. Even so, the "average" aspect of this requirement provides flexibility to allow a given week to exceed this maximum outlier in order to respond to infrequent and unforeseen problems.

With respect to the security personnel who work 12-hour shifts during normal operational periods, I believe that they should be required to take 2.5 days off per week on average. I agree with the staff's reasoning that the extra half day average helps to ensure that the security personnel maintain mental alertness and vigilance to a unique set of challenges, both for routine duties and for potentially dangerous and intense circumstances.

With respect to the minimum days off requirements for 8-hour and 10-hour shifts during normal operational periods, I support the proposed 1 and 2 days off per week, respectively. I believe that the needed rest periods for those working 8-hour shifts are sufficiently provided by the "34-9" break requirement and the requirement to have 1 day off. I believe the 2 days off requirement for those who work 10-hour shifts should provide sufficient rest periods to address cumulative fatigue.

During an outage, I believe that non-security personnel should be provided at least 2 days off in each non-overlapping 14-day block. For security personnel, I favor 3 days off in each non-overlapping 14-day block. Although these days off represent about one fewer than their respective proposed requirements, I believe that outages are relatively short term and involve substantially higher levels of activity than most non-outage operating periods, and that individuals are capable of working with limited rest without degraded performance for short periods. In addition, I am sympathetic to the assertion that attracting skilled craft labor to work during outages could be difficult if they were required to take additional days off, and that doing so could present additional challenges such as longer outages and higher costs. The one additional day off for the security personnel is to allow for more rest to maintain mental alertness and vigilance, similar to the reasoning behind the higher average days off requirement for security personnel during operational periods.

I believe that the proposed requirement to restart the 60-day clock from the beginning of the first outage when a person works two or more successive outages that start less than 2 weeks apart should be excluded from the final rule. I understand that the intent of this proposed requirement is to prevent workers, particularly the migrant workers, from working under the less restrictive work hour controls for a period longer than the intended 60 days. However, I favor relying on the work hour controls described above and other provisions in the rule to address fatigue, rather than imposing what I perceive as an unnecessary restriction that could present complications for work scheduling and attracting craft labor.

Exclusion of Maintenance Workers From Waiver Requirement § 26.207 (a)(1)(I)

I believe that the waiver requirements pertaining to minimum days off for maintenance workers should be less restrictive than those contained in § 26.207 (a). I agree with Commissioner Lyons that plant personnel who will benefit most from this rule would be those workers relied upon to correctly and rapidly diagnose or analyze an operational situation and/or take appropriate initial safety and security actions, often in a relatively independent manner. However, rather than excluding maintenance workers from being subject to the minimum days off requirements, I believe that they should be subject to less restrictive waiver requirements. This would allow for more flexibility in the maintenance personnel work schedules so that they can be available to respond to unexpected plant conditions that require their service. Specifically, maintenance workers should be excluded from § 26.207 (a)(1)(i) which requires a determination that a waiver is necessary to mitigate or prevent a condition adverse to safety.

Inclusion of QC/QV Personnel in the "Operating Personnel" Category

I agree with Commissioner Lyons that personnel who perform independent quality control/verification (QC/QV) checks should be subject to the same provisions as operating personnel defined in category § 26.4 (a)(1) because of their important role in ensuring adequate equipment reliability and availability and post-maintenance and Technical Specification surveillance testing to assure equipment performance. This inclusion would further justify supporting the exclusion of maintenance workers from § 26.207 (a)(1)(i) as stated above.

Effectiveness Reviews of Work Hour Controls

I agree that licensees should evaluate the effectiveness of their control of work hours of individuals who are subject to the requirements. However, I believe that requiring these reviews to be conducted at a frequency of twice per year is excessive for addressing the need. Therefore, I support requiring the reviews to be conducted at a frequency of only once per year.

Reporting Related to Waivers and Fatigue Assessments

I believe that the reporting requirements in § 26.203 (e) is unnecessary to facilitate NRC oversight of implementation of the rule. However, I believe that the elements or the specific information requirements in § 26.203 (e) should be placed under the section on recordkeeping, § 26.203 (d), so that such information will be available for NRC inspections and audits. I understand that the intent of this proposed requirement was to address the problem of a number of licensees making extensive use of deviations from their plant technical specification work hour limits. I share this concern; however, with the new work control limits and stricter waiver requirements in this new rule, I would expect to see a significant decrease in the misuse of the waiver provision. Moreover, by requiring the information to be made available at the site, there should be no decrease in effectiveness of NRC's ability to facilitate oversight of the rule's requirements.

Subpart K FFD Program for Construction

I believe that the NRC should set standard requirements for an FFD program for construction. This would allow for enforceability and greater public confidence. However, these standards should be minimal and be generally consistent with the construction industry's FFD programs. I support the following requirements:

- As provided in the draft final rule, a full Part 26 FFD program should apply to:
 - Security officers required by the NRC
 - Those who perform quality assurance activities related to safety-related or security-related construction activities
 - Designated individuals to monitor the fitness of individuals
 - Individuals directly involved in determining inspections, tests, and analyses certification.
- Subpart K FFD program should only apply at the licensee's or applicant's property where the plant will be operated.
- Individuals performing construction activities for safety-related or security-related structures, systems, and components and first-level supervisors should be subject to pre-assignment, for-cause, and post-accident drug and alcohol testing.
- Individuals performing construction activities for safety-related or security-related structures, systems, and components and first-level supervisors should be subject to either a fitness monitoring program or a random drug and alcohol testing program.
- Exclude from the final rule the requirement that the NRC review and approve each applicant's FFD program plan for construction.

Implementation of New Part 26

I support the staff's proposed implementation schedule in its entirety – full implementation of the rule within 365 days of the rule's issuance date without Subparts I and K; implementation of Subpart I no later than 18 months after the rule's issuance; and implementation of Subpart K upon the rule's effective date, which is 30 days after the rule's issuance in *Federal Register*.

 3/20/07
Dale E. Klein Date

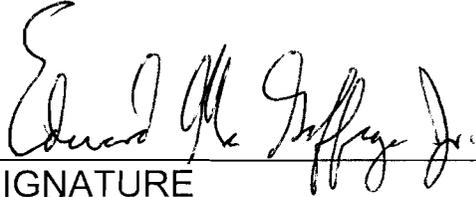
AFFIRMATION ITEM

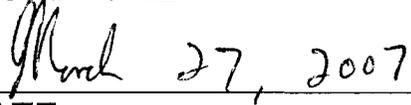
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MCGAFFIGAN
SUBJECT: **SECY-06-0244 - FINAL RULEMAKING-10 CFR PART
26-FITNESS-FOR-DUTY PROGRAMS**

Approved Disapproved Abstain Not Participating

COMMENTS: Below Attached None



SIGNATURE


DATE

Entered on "STARS" Yes No

Commissioner McGaffigan's Comments on SECY-06-0244

I join my colleagues in commending the staff for getting this final rulemaking package before us and for their diligence in working with a wide range of stakeholders to inform their recommendations. There were times when I had my doubts that this rule would be completed while I was a Commissioner. I have been particularly frustrated by frequent invocation of the backfit rule by industry stakeholders for individual provisions of this massive mandatory rule. The drug testing provisions of this rule are almost identical to what the staff proposed five years ago. My colleagues who are new to the Commission should understand that the long process of getting to a final rule is largely the result of what I believe to be an unreasonable interpretation of the backfit rule to apply to individual provisions of updates to mandatory rules. Our predecessors in 1989 would never have believed it would take 18 years to update this rule. I doubt this rule will be amended again for a very long time.

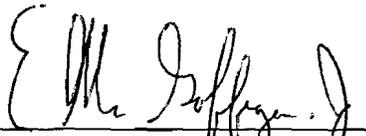
Subpart I - Work Hour Controls

Obviously various stakeholders in industry and employee unions are not happy with the staff's final proposal for Subpart I. Other stakeholders strongly support the staff's proposal. In the end I believe that the staff's proposal is not overly burdensome and I support it, particularly the provisions for security officers. In December 21, 2007 comments, NEI questioned the scientific bases for the different work hour controls for security officers. I would suggest that the scientific basis rests in the fact that these officers carry loaded AR-15s and other weapons, and must be prepared to make life or death decisions throughout their shifts.

Subpart K - Applicability to Construction of New Nuclear Power Plants

First, everyone should realize that Subpart K as proposed in the EDO's resolution of the different staff positions is a significant relaxation from the 1989 rule currently in effect. That rule was the result of problems that had arisen with construction workforces at several plants under construction in the 1970s and 1980s. NUMARC (NEI's predecessor) did not even comment on the provision during the 1989 rule's public comment period. Its implementation does not appear to have been a significant problem for the small number of plants, Watts Bar 1 and Comanche Peak 2, affected by it in the latter stages of their construction.

New plants are likely to face similar challenges and NRC will need regulatory requirements to deal with them. I believe that Subpart K, as amended by the EDO's resolution of staff differences, provides the necessary requirements. The supporting documents to the Commission paper, particularly the Federal Register notice, should be amended to reflect the EDO's resolution of the different staff positions.


Edward McGaffigan, Jr. 3/27/07

(Date)

AFFIRMATION ITEM

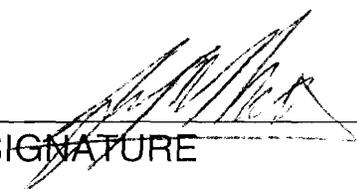
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MERRIFIELD
SUBJECT: **SECY-06-0244 - FINAL RULEMAKING-10 CFR PART
26-FITNESS-FOR-DUTY PROGRAMS**

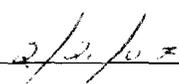
Approved Disapproved Abstain

Not Participating

COMMENTS: Below Attached None



SIGNATURE



DATE

Entered on "STARS" Yes No

**Commissioner Merrifield's Comments on SECY-06-0244
"Final Rulemaking - 10 CFR Part 26 - Fitness-For-Duty Programs "**

I approve the publication of the final rule for 10 CFR Part 26 subject to the attached edits.

I would like to commend the staff for their efforts to codify the requirements governing drug and alcohol testing, as well as fatigue management, for nuclear power plant workers. I acknowledge that issues like fitness-for-duty are complex and that information in the technical literature to support strategies for mitigating such things as human fatigue are sometimes conflicting or not applicable to the specific working conditions found at operating nuclear plants. However, I am encouraged by the meaningful discussion with, and public comment by, interested stakeholders that has occurred on this rule during the course of its development.

Having said that, I believe that it is unfortunate that we find it necessary to even be going down this road. The available scientific data to support both the industry and the staff positions is either lacking in its direct applicability or not supportive of the level of detail contained in this rule. For those reasons, I believe that we must continue to look at the implementation of this rule to evaluate whether the requirements we have imposed are creating an undue burden without a commensurate benefit on the industry. I would expect the staff and the industry to discuss with the Commission the practical application of this rule and to propose improvements or modifications to the rule that become apparent after some period of implementation.

Work Hours

The ability to make accurate and conservative decisions, communicate effectively, and accurately diagnose events are key to safe operation of a nuclear plant. After considering all the information submitted in support of the various positions on the subject of work hours, I reluctantly support the staff view that it has become necessary to regulate the work hours of workers at nuclear plants so that fatigue will not reduce their alertness or ability to perform important job related responsibilities.

The staff has proposed in section 26.205 provisions that would address both acute and cumulative fatigue. I support the provisions of section 26.205 (d) (1) that define the maximum hours that can be worked to mitigate the onset of acute fatigue. Sections 26.205 (d) (2) and (3) define the necessary rest provisions for workers. On behalf of the industry, the Nuclear Energy Institute has suggested that the staff positions requiring a 34 hour break every nine days and a minimum number of days off are unreasonable, are without adequate supporting basis, and, would create a substantial hardship on the industry. In contrast, the Nuclear Energy Institute proposed that the rule should only contain a provision for a 34 hour break every nine days. Their argument rests with a position taken by the Federal Motor Carrier Safety Administration that 34 hours provides an appropriate amount of time to recover from any cumulative fatigue that might occur from a multi-day work period.

In general, I support the staff view that individuals should be provided with a specific minimum number of days off. For normal or routine shift work, I support the position that individuals should generally be provided with two days off per week. During outage work periods, I support the position that individuals should be provided with one day off every seven days. By proactively controlling work hours to ensure that individuals receive a minimum weekly average number of days off while the plant is operating, I believe that individuals will be better rested

and less susceptible to cumulative fatigue during the increased work hours that are common during outages or plant emergency situations.

In sections 26.205 (d) (4) through (7), the staff would impose a 60 day rolling clock for controlling work hours during normal and outage work or for controlling work hours for consecutive outages. While I understand the staff intent, I do not find their arguments compelling and oppose the positions proposed by the staff. In my view the requirements that establish the maximum work hours and minimum time off as well as the required semi-annual reviews of worker hours provide sufficient protection against the potential abuse of worker hour controls such that the addition of the 60 day rolling clock provision becomes an unnecessary burden on licensees. These provisions should be deleted from the rule.

I support the semi-annual requirement to review the licensee performance of controlling the work hours for those individuals covered by the rule, and, I support the basis for the selection of 54 hours as the reference standard for screening individual work hours as part of the required assessments.

Subpart K - Fitness-For-Duty Programs for Construction

In theory, I acknowledge that a fitness-for-duty program will be a fact of life for construction workers at nuclear plant sites, however, I can not support the implementation of Subpart K at this time and recommend the elimination of Subpart K from Part 26. While I commend the staff with proposing options for implementation within the context of Subpart K to give licensees flexibility for choosing the provisions that a licensee would implement on its construction work force, I believe that the construction industry currently has in place a broad spectrum of fitness-for-duty programs that they implement not only on their construction work force but also on their vendors and subcontractors. In that sense, I believe that the use of established industry programs in this area will actually extend the reach of fitness-for-duty programs beyond the reach envisioned by the staff.

Further, I can only endorse, in part, the EDO's proposed resolution of staff concerns identified in Enclosure 2 of SECY-06-044. With respect to the concerns related to the requirements for construction workers, I support the following positions. Fitness-for-duty programs for construction workers should be consistent with established industrial or commercial programs that have their bases developed from national standards such as the Department of Transportation, or the Department of Health and Human Services. The staff should work with industry to establish a reference standard that defines the specific programmatic elements that commercial programs should contain. Some of these elements should consist of drug testing for substance abuse prior to assignment, for-cause, and post-accident and should be supplemented by a random substance abuse testing program. The staff should also assure that the reference standard directs the licensees to implement their required construction worker program to their subcontractors and vendors. I would suggest that the staff inform the Nuclear Energy Institute that this standard would be a candidate for a binding initiative on the part of the industry. I would fully expect that the NRC would inspect the implementation of the licensee program on the reactor construction site as well as at the vendor or subcontractor locations.

If an appropriate standard is available, I would support the staff position that a prior review and

approval of the construction worker program is unnecessary. I would expect that a licensee would describe in the combined license application that the licensee will be using the reference standard for its construction activities and discuss any deviations taken from the established standard. If a licensee chooses to deviate from the standard, it would seem reasonable that the staff could review the deviations but only to the extent necessary to determine if a reasonable basis exists to support the deviation.

In my view, the staff has provided a specious argument with respect to the need for first-line supervisors to be included in a Part 26 fitness-for-duty program. I agree that all fitness monitors must be part of a Part 26 program, however, the argument that first-line supervisors need not be fitness monitors lacks support. It is a well founded management position that first-line supervisors are responsible for determining the fitness of their work teams to perform the required activities before they are sent to perform the work. To argue that some first line supervisors may not be fitness monitors is to not understand the direct line of oversight established in basic management principles. In the end, I support the application of Part 26 programs to:

- 1) Quality assurance or quality control inspectors who oversee safety-related or security related construction activities.
- 2) Individuals directly involved with determining that inspections, tests, and analyses have been successfully completed.
- 3) Individuals designated as fitness monitors, including first-line supervisors.
- 4) Individuals who serve as security officers under NRC requirements, and
- 5) Individuals responsible for oversight and implementation of the licensee fitness-for-duty programs.

Responsibility for assuring completion of treatment plans under FFD program

In section 26.69 (e), the staff determined that the receiving organization has the responsibility to confirm that an individual in a treatment program has complied with the requirement of their program or is continuing to comply with those requirements as part of the decision to permit access authorization. The industry has argued that it should be the responsibility of the organization that imposed the treatment program to assure that the individual is fulfilling or has fulfilled the requirements of any treatment program. I support the staff position on this point. If a licensee wishes to grant access authorization to an individual that has either self-disclosed or on whom the receiving licensee has obtained information that the individual was in an abuse treatment program as a condition of previous employment, I believe that the receiving licensee assumes the responsibility for assuring that the individual is satisfying any treatment obligations before granting access to their site.



2/21/07

AFFIRMATION ITEM

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER JACZKO
SUBJECT: **SECY-06-0244 - FINAL RULEMAKING--10 CFR PART
26--FITNESS-FOR-DUTY PROGRAMS**

Approved Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached None _____



SIGNATURE
3/22/02

DATE

Entered on "STARS" Yes No _____

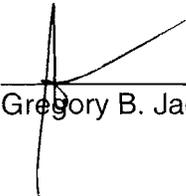
**Commissioner Jaczko's Comments on SECY-06-0244
Final Rule to Update 10 CFR Part 26, "Fitness-For-Duty Programs"**

I approve the draft final rule for Part 26. I applaud the staff's considerable effort in crafting this rule to update the drug and alcohol testing requirements for nuclear workers and implement work hour controls as part of a comprehensive approach to fatigue management. This rule is consistent with my firm belief that nuclear workers must be fit to perform their duties. In addition to the enhancements this rule would make, I am encouraged that the issue of worker fatigue will come to resolution with its issuance.

The staff's comprehensive efforts to engage stakeholders in development of this rule, including holding meetings near nuclear power plants across the nation, has resulted in a thorough consideration of the issues. This broad outreach effort should serve as a model for rulemaking actions in the future.

Because of the staff's extensive outreach efforts and involvement with stakeholders on these complex issues, I support all provisions of this final rule. I do not believe that individual items should be singled out piecemeal for exclusion or modification after such a deliberative process.

I recognize that not everyone is completely satisfied with all aspects of the rule. However, I believe the final rule is a comprehensive approach to what is a very complicated issue. Because of the complicated nature of the rule, and the many views expressed by stakeholders, I believe staff should, through its normal inspection and oversight role, continue to monitor whether any concerns with availability of contract workers for outages materialize. If so, I would expect the staff to propose modifications to the rule necessary to ensure a skilled contract workforce continues to be available to execute safe plant outages.

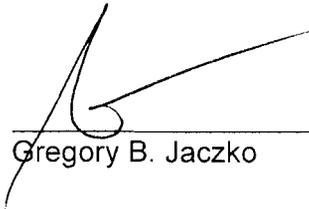


Gregory B. Jaczko 3/22/07 Date

**Commissioner Jaczko's Additional Comments on SECY-06-0244
Final Rule to Update 10 CFR Part 26, "Fitness-For-Duty Programs"**

I am supplementing my comments on the draft final rule presented in SECY-06-0244, because the Commission made several important modifications to the draft final rule. In my previous vote comments, I indicated that I supported the rule as drafted by the staff. The staff met with many stakeholders and developed a delicate compromise that would improve public health and safety by imposing new requirements for drug and alcohol testing and fatigue management. I continue to believe that the best approach is for the Commission to accept the staff rule without significant modification, but I intend to support the final rule despite the modifications made by the Commission. I believe that the safety and security benefits that remain in the rule for licensed operators, security guards, and others, are substantial enough compared to the present agency requirements to warrant support for the rule.

The major requirements modified by the Commission involves the fitness for duty requirements imposed on maintenance workers. The final rule likely to be adopted by the Commission would reduce the amount of rest days maintenance workers are required to have. In particular during outage periods, maintenance workers will now be allowed to work 72 hour work weeks throughout the duration of the outage. In the staff proposal, maintenance workers would be required to work a reduced 60 hour work week every couple weeks. I continue to believe the staff proposal would not have created a situation in which it would be difficult to obtain a qualified work force and would have ensured the fitness for duty of maintenance workers, since these workers perform important maintenance work on key safety systems.


Gregory B. Jaczko

4/16/07
Date

AFFIRMATION ITEM

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

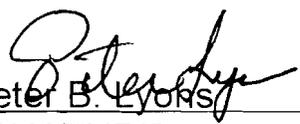
FROM: **COMMISSIONER LYONS**

SUBJECT: **SECY-06-0244 - FINAL RULEMAKING-10 CFR PART
26-FITNESS-FOR-DUTY PROGRAMS**

Approved X Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached X None _____


Peter B. Lyons

SIGNATURE

2 / 5 / 07
DATE

Entered on "STARS" Yes X No _____

Commissioner Lyons' Comments on SECY-06-0244
Final Rulemaking - 10 CFR Part 26 - Fitness-for-Duty-Programs

I approve the final rule as recommended by the staff in SECY-06-0244 with the following exceptions and comments.

First, I once again highly commend the staff as I did in my earlier vote on SECY-05-0074 which recommended the proposed rule for public comment, and in particular those technical staff members who have heavily invested their professional talents and expertise in this long-term endeavor. I am pleased that the Commission is now finally poised to establish a sound regulatory framework that gives needed prescription and/or formality to important provisions of our requirements for Fitness for Duty programs. My comments below should not be construed as undervaluing the intensity of this staff effort, the many extra hours and personal dedication devoted to its completion, the extensive degree of outreach and engagement made by the staff to all public stakeholders, and the very healthy public dialog.

In forming my opinions on this draft final rule, I've have carefully considered the seven stated goals, the staff's analysis and disposition of public comments, and additional public comments submitted following publication of the draft final rule. Specific comments are given below.

Reporting Requirements - The staff should delete proposed § 26.203 (e) (2) (I) through (iv) and replace it with a revised § 26.203 (e) (2) as follows: "A summary of corrective actions, if any, resulting from the analyses of these data, including fatigue assessments." The deleted items should be moved to an appropriate location in § 26.211 Fatigue Assessments.

This change would result in a reporting approach for the fatigue program that is more consistent with what is already being done for drug/alcohol program reporting. The fatigue assessment reporting details that the staff's draft final rule would prescribe in § 26.203 (e) (2) (I) through (iv) are more the purview of a licensee's corrective action program, and would be more detailed than the reports now prescribed for the drug/alcohol data analyses summary reports required under § 26.717 ©. This change would also adhere to a more performance-based approach in which the data of greatest interest to the NRC are the performance data. If performance problems are revealed through these data, then NRC inspection of the licensee's analyses and actions within their corrective action program may be the most appropriate regulatory response. Finally, although I do not find a strong nexus between any of these reporting requirements and the seven stated goals for this rulemaking, I believe regulatory consistency is always a worthy goal.

Minimum Days Off Requirements - Maintenance Personnel - The staff should add to proposed § 26.4 (a) (2), or make equivalent changes to the draft final rule, as follows: "Such persons need not meet the requirements of § 26.205 (d) (3)." In addition, 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.

This change would have the effect, for maintenance personnel, of removing the minimum days off requirements and retaining all other applicable requirements of the rule (e.g. work hour limits, break requirements, and automatic reviews when exceeding 54 hours/week average). In addition, it would clarify the scope of what is covered under the term 'maintenance' (e.g. repair, modification, testing, calibration, first-line supervision, etc.). Maintenance is clearly important to safety and for this reason the NRC requires licensees to maintain quality assurance and corrective action programs that meet high standards, the performance results of which are subject to NRC inspection. In addition, post-maintenance and Technical Specification surveillance testing provide additional assurances of equipment performance. Even further, the

1991 rule 10 CFR 50.65 "Requirements for monitoring the effectiveness of maintenance at nuclear power plants" imposed additional regulatory requirements aimed at ensuring adequate SSC reliability and availability through specific monitoring and corrective actions. These multiple-layered requirements suggest that maintenance personnel need not be subject to the same degree of fatigue mitigation requirements as the remaining categories of personnel in § 26.4 (a). One of the stated goals of this rulemaking is to establish enforceable requirements, and the above change would still accomplish that goal for maintenance personnel while remaining consistent with prior NRC work hour guidelines (i.e. Generic Letters 82-12 and 83-14).

I note that the commercial aviation maintenance personnel currently have no corresponding work hour regulations. Yet most people are entirely comfortable using commercial aircraft knowing that flight crews are subject to strict work hour and break rules, even though maintenance crews are not.

I acknowledge the staff's point that maintenance errors have been shown to account for a portion of the risk for a percentage of risk-significant events, that many of these errors are latent (i.e. not discernable from post-maintenance testing), and that it is possible that fatigue was a contributor although there are no actual data to corroborate this. However, I believe that the addition of enforceable work hour, break, and review requirements for maintenance personnel, added to the existing multiple layers of other regulatory requirements, are adequate to achieve the goals of this rulemaking without the need for further complicating work scheduling by including minimum days off requirements.

Minimum Days Off Requirements - Other Personnel - Staff should ensure that personnel who actually perform independent quality control/verification (QC/QV) checks are subject to the same provisions as operating personnel defined in category § 26.4 (a) (1). Staff should continue engaging the industry and other stakeholders to complete the associated regulatory guidance for this rule, and ensure that it addresses the broad range of questions of interpretation and implementation. In addition, the effective date of the fatigue provisions of this rule should be one year from its date of publication.

This change would have the effect of ensuring the requirements for QC/QV personnel are the same as for operating personnel. I have carefully reviewed the arguments on both sides of whether there should be a minimum days off requirement in this rule, and I support its retention for what I will collectively term as "operating personnel" (i.e. § 26.4 (a) (1), (a) (3), (a) (4), and (a) (5)). I believe that, consistent with my earlier vote, the most clear, substantial, and necessary safety benefit of this rule will be its application to those plant personnel relied upon to correctly and rapidly diagnose or analyze an operational situation and/or take appropriate initial actions, as well as correctly make operational decisions that maintain the intended margins of safety and security, often in a relatively independent manner. Therefore, I support the staff's draft final rule provisions for minimum days off as applicable to persons categorized in § 26.4 (a) with the exception of (a) (2) maintenance personnel as noted above. However, these requirements add complexity and are not likely to be absolutely clear for all possible situations that can arise. Therefore, I stress the need to ensure adequate regulatory guidance will be available and for an implementation date that provides reasonable time for industry to prepare.

In fact, during the extensive public dialog, the industry itself proposed the concept of minimum days off as an alternative to addressing cumulative fatigue through average group work hour limits, which I questioned in my earlier vote. The staff accepted this comment and incorporated it into the draft final rule. The most recent industry input now asserts that minimum days off requirements are an unnecessary burden because the 34 hour break in nine days provision of the rule addresses cumulative fatigue. They point to the Department of Transportation (DoT) rules for truck drivers which incorporated this concept. However, the scientific basis for this rule was not precise and DoT sought recommendations from an expert

panel that staff has stated gave only very cautious support to this concept by noting that the circumstances under which this break time would be fully restorative would not always be true for all truck drivers. Ultimately, the DoT rulemaking still incorporated this concept, noting that circumstances would not always be "ideal," but that the 34 hour break requirement would "limit" the build-up of cumulative fatigue and give an "adequate" opportunity to "help minimize" it. The industry argument that the 34 break requirement adequately addresses cumulative fatigue hinges primarily on DoT's judgement for truck drivers, and that the adverse implications of imposing additional requirements are primarily to maintenance/craft personnel. In arriving at my position on this matter, I believe my suggested changes substantially mitigate the implications for maintenance personnel, while my support for the retention of both the 34 hour break and the minimum days off requirements for operating personnel is based on the greater assurance I believe is needed for nuclear plant operating personnel relative to truck drivers.

Outages - Staff should revise § 26.205 (d) (4) outage requirements to exclude the § 26.4 (a) (2) category (i.e. maintenance personnel).

The effect of this change, in conjunction with the previously suggested change above, would be to maintain the same work hour, break, and review requirements for (a) (2) maintenance personnel regardless of whether the plant is operating or in an outage. This change would still retain the added flexibility for operating personnel during outages by replacing the minimum days off requirement with a requirement for 3 days off each 15 day period, a requirement the staff believes is still sufficient to help address cumulative fatigue for the limited outage periods.

Multiple Outages - Staff should delete § 26.205 (d) (7).

The effect of this change would be to allow an outage worker to move immediately from one outage to another under the outage work hour provisions of the rule, without being required to have a prescribed period with required minimum days off. Although I find the complexity of this rule to be further from a performance-based approach than I would normally prefer, I can generally accept the additional detail to provide greater short term flexibility for outages, while still retaining enforceable requirements. However, the multiple outage requirement exceeds what I am willing to support. The staff's intent is to ensure transient outage workers do not work continuously under the relaxed outage work hour limits for periods in excess of what the rule would normally allow. Consistent with my view that important distinctions between plant operating and maintenance activities warrant commensurate differences in regulatory treatment, and given that enforceable work hour and break requirements continue to exist for transient outage workers regardless of how many sequential outages they work, I believe this paragraph adds undue complexity without sufficient benefit.

Construction Activities Under Subpart K - First and in general, I agree with those segments of the staff and public stakeholders that a FFD program should be required by the NRC even when fuel is not yet on-site. A well-recognized quality principle for many years has been that quality must be built into a product from the very start, without relying solely on post-manufacture testing or inspection. That being said, there is likely to be only a small subset of specific construction activities for which the best opportunity to verify the necessary quality will occur once in the lifetime of the plant (e.g. concrete pours). The vast majority of construction activities will be on SSCs for which testing and inspection over the plant's lifetime will provide continuing evidence of the required quality. I acknowledge the industry position that the architect engineering and construction firms and other contractors and their sub-contractors will have their own FFD programs, but I believe a minimum standard needs to be set by the NRC for consistency and enforceability. However, given the existence of other elements of the licensee quality assurance program, I believe this minimum standard can be reasonably consistent with

the expected industrial FFD programs that would otherwise be implemented. Therefore, I support the following:

1. Subpart K full FFD program should apply to on-site (where the plant will be operated) personnel as follows:
 - A. QA/QC/QV inspectors who may be called upon to oversee safety-related or security-related construction activities,
 - B. Personnel directly witnessing inspection and testing in support of ITAAC certification,
 - C. Second-level and higher supervisors and managers,
 - D. Reviewing officials involved in the FFD or access authorization programs who determine which personnel may be given unescorted access,
 - E. Any security personnel that are required by the NRC.

2. For construction workers and first-level (direct) supervisors, the FFD program elements required for detecting and deterring substance abuse should be
 - A. Pre-assignment, for-cause, and post-accident drug and alcohol testing, and
 - B. Either a fitness monitoring program, or a random drug and alcohol testing program with a minimum sampling rate that is reasonably consistent with the expected general industrial practice. For the latter option, the addition of a behavioral observation program would not be required.

3. The staff's review of the COL application description of the FFD program as part of the COL review process is adequate.

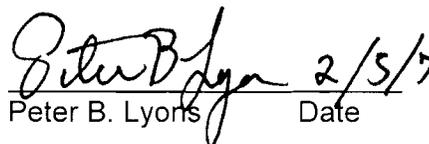
I believe these provisions would help to enhance public confidence, provide regulatory consistency, and not be unduly burdensome given existing industrial practices.

Drug and Alcohol Testing - Staff should clarify the Statements of Consideration regarding the acceptability of Evidential Breath Testing (EBT) device calibration methods currently in use.

Section 26.91(e)(1) adds a requirement that licensees and other entities must implement the most recent version of the manufacturer's instructions for the use and care of the EBT consistent with the quality assurance plan submitted to NHTSA for the EBT, including the frequency of 'external' calibration checks. Many existing EBTs use a calibration method that may not be termed 'external'. This change would clarify the rule requirement so as not to unintentionally limit the use of existing EBTs.

Category 1A facilities - Staff should revise the Summary section on page 1 of the final rule package to include that this rule also applies to facilities possessing Category 1A material.

This would give all readers a clearer understanding of who is affected by the rule.


Peter B. Lyons Date 2/5/17