



PO Box 1551  
411 Fayetteville Street Mall  
Raleigh NC 27602

DOCKET NUMBER  
PROPOSED RULE # 26  
(70FR 50442)

DOCKETED  
USNRC

66

December 30, 2005 (11:03am)  
OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Serial: PE&RAS-05-114  
December 21, 2005

Secretary  
United States Nuclear Regulatory Commission  
Attention: Rulemakings and Adjudications Staff  
Washington, DC 20555-0001

**SUBJECT:** Comments on the Proposed Part 26 Rule on Fitness for Duty Programs (70 FR 50442)

Ladies and Gentlemen:

On August 26, 2005, the NRC published in the Federal Register (70 FR 50442) a notice of a proposed revision to 10 CFR Part 26 on Fitness for Duty (FFD) Programs. This letter provides comments on this proposed rule.

Progress Energy supports most of the drug and alcohol testing provisions of the proposed rule. The proposed changes related to drug and alcohol testing have been developed over a period of many years with due consideration for the many improvements recommended by industry groups. These changes will make FFD programs more efficient and effective.

Progress Energy also supports many of the provisions of the work hour portion of the proposed rule. Requirements for policies, procedures, training, behavioral observation, and self-reporting of fatigue provide a sound foundation for fatigue management. Also, codifying the proven individual work limits from Generic Letter 82-12 should eliminate inconsistency in the application of these limits.

As discussed in the attachment to this letter, Progress Energy does not support several provisions of the proposed rule because these provisions are unnecessary, unsupported by scientific evidence, and untested in the workplace. Also, several provisions unnecessarily inhibit the management flexibility needed to execute plant activities effectively and efficiently. We are particularly concerned about those provisions associated with collective work hour limits, break requirements, and reporting requirements. We are also concerned with the unprecedented and unnecessary layering of regulatory requirements that are contained in the work hour provisions of the proposed rule. Progress Energy believes this layering of requirements could have significant safety and financial impacts on the industry and could result in the unintended consequences outlined in the Nuclear Energy Institute's (NEI's) December 20, 2005 comment letter on the proposed rule.

Template = SECY-067

SECY-02

Progress Energy has actively participated on the NEI Work Hour Task Force and endorses the industry's recommendations that are outlined in NEI's December 20, 2005 comment letter. We also agree that given the significant changes involved in this rulemaking, 12 months will be required for implementation of a majority of the new requirements once the final rule is published in the Federal Register.

Please contact me at (919) 546-4579 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Brian C. McCabe". The signature is written in a cursive style with a large, prominent "B" and "C".

Brian McCabe  
Supervisor - Regulatory Affairs

HAS  
Attachment

## Comments on the Proposed Part 26 Rule on Fitness for Duty Programs

### Introduction

Progress Energy supports most of the drug and alcohol testing provisions of the proposed rule. The proposed changes related to drug and alcohol testing have been developed over a period of many years with due consideration for the many improvements recommended by industry groups. These changes will make FFD programs more efficient and effective.

Progress Energy also supports many of the provisions of the work hour portion of the proposed rule. When there is a clear nexus with safety, Progress Energy supports the establishment and consistent use of limits on work hours by individuals in key job duty groups as part of an integrated program for managing fatigue. Such an integrated program includes performance based regulation and the use of defense-in-depth measures. Requirements for policies, procedures, training, behavioral observation, and self-reporting of fatigue provide a sound foundation for fatigue management. Also, codifying the proven individual work limits from Generic Letter 82-12 should eliminate inconsistency in the application of these limits.

Progress Energy does not support several features of the proposed rule because these features are unnecessary, unsupported by scientific evidence, and untested in the workplace. These additional measures do not improve protection against fatigue beyond the protection already available in Generic Letter 82-12. These features will not result in a meaningful improvement in public health and safety but will result in the introduction of arbitrary, baseless, and burdensome restrictions that could adversely affect our ability to schedule plant activities effectively.

Progress Energy supports the industry's recommendations that are outlined in the Nuclear Energy Institute's (NEI's) December 20, 2005 comment letter on the proposed rule. Progress Energy believes that the industry's recommendations will reduce unnecessary regulatory burden, provide the management flexibility needed to operate plants safely, and allow completion of outages in a manner that has proven to be safe, timely, and cost effective. As outlined in NEI's comments, these recommendations will also eliminate many of the unintended consequences of the proposed rule.

### Rule Package and Regulatory Analysis

Progress Energy shares the concerns outlined in NEI's comment letter regarding the supporting statements in the rule package and the quality of the regulatory analysis.

The rule package does not provide a balanced analysis of the issues. It is difficult to correlate research findings to actual conditions and management approaches found in the power reactor industry. Also, many of the stated conclusions cannot be supported based on a review of human performance and other performance indicators of plant operational effectiveness. In general, the rule package overstates the potential for fatigue induced errors.

The backfit analysis provided in support of this rule is seriously deficient and does not provide the information needed to make a rational decision of the relationship between the projected burden and the benefit in improved public health and safety. Although effort has been expended to estimate the cost, there is little meaningful discussion of the actual improvements in public health and safety. The "qualitative" claim that each element will provide substantial improvement in public health and safety is not supported by facts and does not consider the diminished impact when other rule provisions are considered. With the approach taken to the

## Comments on the Proposed Part 26 Rule on Fitness for Duty Programs

analysis, an unending number of added restrictions could be “justified.” Progress Energy does not believe that the 10 CFR 50.109 requirements for a backfit analysis have been met.

### General

Clarification is needed on whether, as used in the proposed rule, “non-negative” and “positive” are synonymous. Consistent terminology is preferred if usage is interchangeable; otherwise, definitions should be provided to assure program compliance and effectiveness.

### Subpart A – Administrative Provisions

**26.3(e):** Progress Energy strongly endorses the industry’s comments as discussed in NEI’s December 20, 2005 comment letter on the proposed rule.

**26.5:** To ensure consistent and successful implementation of the rule, the term “directing” needs to be clarified. The term “directing” has added a significant degree of uncertainty as to who should and should not be included in each applicable functional group. Without better definition of expectations in this area, there will repeatedly be disagreement regarding implementation requirements.

The application of the term “directing” to engineering personnel, who provide technical advice or develop technical input that is subject to established rigorous review processes, is of particular concern. Progress Energy agrees with NEI’s analysis of this matter as presented in their December 20, 2005 comment letter. Specifically, most individuals who have unescorted access to the protected area perform a job function that has some relationship to the safe operation and security of the facility. Their responsibilities are part of a layer of measures providing defense-in-depth to the protection of public health and safety. The remainder of the Fitness for Duty rule provides for a robust set of requirements for all individuals within the protected area to ensure each individual is fit to perform assigned duties.

As discussed in NEI’s comment letter, the NRC staff’s intent, as conveyed during public meetings on this matter, clearly appeared to include only those individuals who had a direct, hands-on responsibility for the operation and maintenance of the plant. Industry expressed concern that the term “directing” could be misinterpreted to include personnel outside the NRC’s intended scope. It is apparent from the rule package’s inclusion of some engineers that the industry’s concern was well-founded. As such, the term “directing” needs to be clarified.

### Subpart B – Program Elements

**26.31(d)(2)(iv):** In the second sentence, “... off site when selected for testing, and not reasonably available...” should be changed to “... off site when selected for testing, or not reasonably available...” to be consistent with NEI 03-01.

**26.63(d):** In the first sentence, “... and presentation of an individual’s signed release authorizing ...” should be changed to “... and the individual has signed a release authorizing ...”

## Comments on the Proposed Part 26 Rule on Fitness for Duty Programs

### Subpart H – Determining Fitness-for-Duty Policy Violations and Determining Fitness

**26.183(d)(1)(i):** As written, this provision of the proposed rule appears overly restrictive with respect to the independence of the MRO staff. This regulation should be clarified to ensure that licensees are not needlessly required to add additional staff in order to isolate these responsibilities.

**26.183(d)(2)(iii):** This regulation should be revised to permit the MRO staff, as an administrative function to assist the MRO, to obtain and validate the prescription information necessary for the MRO to make a determination.

**26.183(d)(2)(iv):** This regulation should be revised to permit the staff to report results to licensee management after those results have been confirmed by the MRO.

**26.187:** This regulation should be revised to give the MRO the option to function as the Substance Abuse Expert (SAE), as do DOT regulations. This would avoid an unnecessary financial burden for licensees that have an MRO who can make the SAE determinations.

### Subpart I – Managing Fatigue

#### General

- 1) Progress Energy supports the exclusion of turnover time as discussed in the rule package. The rule package discussion focuses on the importance of a proper turnover to safe plant operations and maintenance, stating: “the NRC believes that the benefit of including turnover for managing worker fatigue would be outweighed by the potential adverse consequences on the quality of shift turnover.” Progress Energy agrees with this conclusion.
- 2) Since the Commission has already required licensees to establish fatigue management for the nuclear security force post 9/11, the existing Order for Fatigue should be superseded with the issuance of 10 CFR Part 26.

**26.197(a) and 26.197(b):** Progress Energy supports the proposed requirements pertaining to the establishment of a policy and procedures for the management of fatigue. The expectations for fatigue management should be considered to supplement those required in 26.27 within the context of the larger effort to ensure that every individual who works within the protected area is fit-for-duty.

**26.197(c):** Progress Energy supports the proposed requirements for training. This training will ensure that individuals within the scope of this rule have the knowledge and abilities to recognize and understand the contributors, effects, and symptoms of fatigue, as well as countermeasures for fatigue.

### Comments on the Proposed Part 26 Rule on Fitness for Duty Programs

**26.197(e)(1) and 26.197(e)(3):** The reporting requirements of 26.197(e)(1) and (3) should be eliminated. Those requirements are unnecessary to protect public health and safety, unnecessary to facilitate NRC oversight of the revised rule, unduly burdensome for licensees, and inconsistent with provisions of the Paperwork Reduction Act. The nuclear industry has established an excellent performance record for compliance with regulatory requirements. The rule package provides no reason to believe that the industry would fail to comply with the requirements of the revised rule without the imposition of these reporting requirements. Additionally, the NRC has an effective oversight process that does not depend on extensive data collection from licensees. The rule provides no convincing rationale as to why these new reporting provisions are needed to augment the NRC's established licensee oversight and inspection process.

**26.197(e)(2):** The reporting requirement of 26.197(e)(2) should be revised to apply only to the job duty group comprised of security personnel as defined in 26.199(a)(5).

**26.199(a)(1) and (2):** The word "on-site" should be replaced with "job-site" to emphasize the direct involvement of the person responsible for directing the operations or maintenance activity. This change would make these provisions consistent with the definition of "directing," which clearly focuses on individuals directly involved with the performance of the work activity. Progress Energy is concerned that the rule package is inappropriately providing a significantly broader definition of "on-site directing" than was conveyed during public meetings to review the proposed rule language. Progress Energy strongly believes that it is inappropriate to include engineers, Shift Technical Advisors, and other technical support personnel within the scope of the work hour restrictions. The nature of their jobs and their robust administrative control processes combine in a defense-in-depth approach to provide adequate control of issues related to potential worker fatigue.

**26.199(b)(1)(iii):** In the second sentence, the words "include in the calculation of the individual's work hours all work hours worked, including hours worked performing duties that are not listed in paragraph (a) of this section, and" should be eliminated. This provision of the proposed rule is overly burdensome to implement and unnecessary for an individual who joins the job duty group at some point during the monitoring period. The individual limits of paragraph (d) will be sufficient to meet the intent of 26.199(b)(1)(iii) without the additional qualification.

**26.199(c):** This requirement should be eliminated because it lacks the clarity necessary for consistent implementation and enforcement, and it is unnecessary given the numerous layers of prescriptive work hour limits which accomplish the same objective of preventing impairment from fatigue due to the duration, frequency, or sequencing of successive shifts.

**26.199(d)(1) and 26.199(d)(2)(i):** Progress Energy supports the application of the updated individual limits from Generic Letter 82-12 and believes that these limits are effective in preventing both acute and cumulative fatigue. Of particular note, Progress Energy supports the transition from an 8-hour break between work periods to a 10-hour break. Progress Energy believes that the 10-hour rest period is the most important improvement in the rule because it dramatically reduces the potential for cumulative fatigue. When combined with the requirements in 26.199(d)(1), the 10-hour break requirement in 26.199(d)(2)(i) obviates other proposed layers of regulations that are unsupported scientifically or unreasonably burdensome to implement.

### Comments on the Proposed Part 26 Rule on Fitness for Duty Programs

**26.199(d)(2)(ii):** The break requirements of 26.199(d) focus on days off without considering the number of hours worked in a particular day and the actual breaks between work periods. The application of a single set of break criteria to both the 8-hour and 12-hour shift rotations cannot be implemented in an equitable manner. The loss of scheduling flexibility for the 8-hour shift rotation will undermine the viability of this rotation and will result in most licensees shifting to a 12-hour rotation. The lack of management flexibility resulting from this provision could also have significant unintended safety implications as discussed in NEI's December 20, 2005 comment letter.

To provide sufficient opportunity for rest without unintentionally favoring licensees on a predominantly 12-hour work schedule, 26.199(d)(2)(ii) should be revised to provide more equitable breaks during periods of normal operations. For a crew in a predominantly 12-hour work schedule, an average of two 24-hour breaks per week over the nominal rotation cycle of between 4 and 6 weeks should be provided. For a crew in a predominantly 8-hour or 10-hour work schedule, an average of one 24-hour break per week over the nominal rotation cycle of between 4 and 6 weeks should be provided. Individuals should be exempt from this requirement for the first 10 weeks of an outage in which the requirements of the proposed paragraph (d)(2)(iii), as provided below, are applied.

The alternative approach proposed in this letter will put break requirements for 8-hour and 12-hour shifts on an equitable basis. The proposed alternative to the break limits will also address the potential for cumulative fatigue in a rigorous manner, while providing the needed flexibility to conduct critical maintenance in a timely manner.

**26.199(d)(2)(iii):** To provide sufficient opportunity for rest while working within the practical schedule commonly employed during an outage, delete 26.199(d)(2)(iii) and replace with:

“(iii) During outage periods, in which the requirements of (d)(2)(ii) above are not applied, a 24-hour break in any 7-day period.”

During an outage, a one day break in any 7-day period is sufficient, when combined with other rule provisions to address cumulative fatigue. The rule package analysis significantly overstates the potential for fatigue by not considering the practical schedule employed by licensees. Progress Energy believes that the 48-hour break every 14 days is unnecessary and should be dropped from the rule.

During outages, many facilities have found the two “super-crew” concept to be highly effective for managing the intense, short duration work seen in an outage. In this approach, several operating crews are combined into two sections, one working 12-hour day shifts and the other working 12-hour night shifts. Each individual within the crew is scheduled for a day off at least once every 7 days. As a result, individuals work up to 72 hours in any 7-day period, yet get adequate breaks to ensure that cumulative fatigue is not an issue. The super crew approach offers rest opportunities that have not been discussed in the rule package.

- 1) Individuals receive a 12-hour break between work periods.
- 2) Individuals receiving a one day break have two sleep opportunities in the 36 hours during the break period.

### Comments on the Proposed Part 26 Rule on Fitness for Duty Programs

Progress Energy supports the industry analysis described in NEI's December 20, 2005 comment letter which concludes that a combination of one day off in any 7-day period, in conjunction with the work hour limits of 26.199(d)(1) and the minimum 10-hour break, is fully protective against cumulative fatigue.

**26.199(d)(3)(i)(A):** The regulation should be revised to add "or a determination that the waiver is necessary for plant operations" following the words "either determination" to provide for greater operational flexibility in the determination that a waiver is necessary. Although infrequent, unexpected conditions do arise where a waiver would allow timely completion of important work that is related to neither safety nor security. Senior site management needs the flexibility to address these situations.

**26.199(f):** When the other rule provisions are considered, collective work hour limits are not needed for any functional group other than security officers. The potential for cumulative fatigue is adequately addressed by other provisions of the proposed rule, obviating the need for the added requirements of collective work hour limits. Progress Energy agrees with NEI's analysis showing that security officers should be recognized as a special case. Progress Energy believes that, except for the job duty group comprising security personnel as identified in 26.199(a)(5), the collective work hour limits in the proposed rule lack a credible basis, result in no improvement in the protection of the public health and safety, and are a significant and unnecessary regulatory burden on licensees. Consequently, Progress Energy recommends that the proposed requirements be revised to remove collective work hour limits from all other job duty groups.

Progress Energy also believes that increasing the outage exemption from 8 to 10 weeks would not represent any measurable increase in the potential for cumulative fatigue. Progress Energy is persuaded by the industry data that show no negative trend in human performance near the end of outages of 5 to 13 weeks in duration. Progress Energy recommends that the 8-week exclusive for outages be increased to 10-weeks to accommodate anticipated upcoming outages of longer duration.

It is important to note that there could be unintended consequences in trying to comply with the NRC staff's proposed group work hour limits in the final stages of the outage. The loss of supplemental workers and loss of workforce focus would represent a significant challenge in maintaining the quality achieved during current outages. Supplemental workers are already in short supply. As a result, attracting qualified supplemental workers to support outages is challenging. Imposing additional work hour restrictions on these individuals will make the problem significantly worse. The industry has already experienced cases where individuals have left during an outage to go to a job that offered more overtime. For many supplemental workers, the availability of overtime is a key factor in where they decide to work.

Attracting the same individuals to work subsequent outages and retaining them for the duration of the outage significantly improves the quality of the work process. If the industry were forced to place supplemental workers on a 48-hour week instead of a 72-hour week, there would likely be major attrition in the critical final phases of the outage. Even if replacement workers can be found, the lack of experience on the specific jobs will generate a higher potential for errors than any projected fatigue induced errors.

Comments on the Proposed Part 26 Rule on Fitness for Duty Programs

**26.201(b):** The words “Either a supervisor or a staff member of the FFD program, who is ...” should be revised to “Either a supervisor or a FFD program staff member, who is ...” to clarify that the supervisor need not be a member of the FFD program to conduct the fatigue assessment.