

February 1, 2000

FOR: The Commissioners
 FROM: William D. Travers /RA/
 Executive Director for Operations
 SUBJECT: RULEMAKING PLAN, "DECREASE IN THE SCOPE OF RANDOM FITNESS-FOR-DUTY TESTING REQUIREMENTS FOR NUCLEAR POWER REACTOR LICENSEES," FOR AMENDMENTS TO 10 CFR PART 26

- PURPOSE:
- BACKGROUND:
- DISCUSSION:
- CONCLUSION:
- NOTE:
- RESOURCES:
- COORDINATION:
- RECOMMENDATIONS:
- Regulatory Issue
- Current Regulatory Framework
- How Rulemaking Will Address the Regulatory Problem
- Rulemaking Options
- Goals of the NRC
- Preferred Option
- Impact on Licensees
- Benefit/Decrease of Burden
- Legal Analysis by the Office of the General Counsel
- Backfit Analysis
- Issues of Agreement State Implementation
- Supporting Documents
- Issuance by EDO or Commission
- Interoffice Management Steering Group
- Staff Level Working Group/Concurring Official
- Public/Industry Participation
- Resources
- Schedule
- Overview
- SUMMARY OF COMMENTS
- *OTHER COMMENTS RELATED TO THE SCOPE OF RANDOM TESTING*
- *OTHER COMMENTS NOT RELATED TO THE SCOPE OF RANDOM TESTING*

PURPOSE:

To obtain Commission approval to initiate rulemaking to amend the NRC's requirements for the scope of random fitness-for-duty (FFD) testing for nuclear power reactor licensees required by [10 CFR Part 26](#), "Fitness for Duty Programs."

BACKGROUND:

On August 18, 1992, the Commission issued a staff requirements memorandum (SRM), COMSECY-92-018, to direct the staff to reexamine the justification for imposing random FFD testing on certain employees, as codified in 10 CFR Part 26. The SRM instructed the staff to consider why it should require random FFD testing of workers who have "no direct safety functions, particularly for clerks, secretaries, or other employees who have unrestricted [unescorted] access to a nuclear plant's protected area, but whose own jobs are not directly safety-related."

On January 26, 1993, while the staff's review was in progress, the International Brotherhood of Electrical Workers (IBEW) union submitted a new exemption request. Following extended correspondence with the staff, the IBEW union resubmitted a modified exemption request on December 6, 1993. That request sought an exemption from Part 26 testing for a specific group of clerical workers at Diablo Canyon who have unescorted access to the protected area but who (1) do not perform any safety-related duties and (2) do not have unescorted access to the plant's vital areas (as defined in [10 CFR 73.2](#), "vital area" means any area that contains vital equipment). On January 27, 1994, at the staff's request, the Office of the General Counsel (OGC) advised the IBEW union that the exemption request would be held in abeyance pending a decision in response to COMSECY-92-018. That request is still pending.

The Commission also instructed the staff to consider the impact of such testing on licensees, including legal and economic considerations of changes in the scope of established FFD testing programs.

Pursuant to COMSECY-92-018, the staff evaluated the current scope of random FFD testing at power reactors, as required by 10 CFR Part 26, and considered the impact of implementing any of four possible alternatives to the current requirements.

SECY-94-016, dated January 24, 1994, reported the results of the staff's analysis to the Commission. On May 11, 1994, the staff published its study of these options in the *Federal Register* (59 FR **EXIT** 24373) to solicit public comment. The staff received 34 letters of comment from the following sources: 20 letters from licensees, 5 from the IBEW union, 1 from the Nuclear Energy Institute, 4 from members of the general public, 2 from State government offices, 1 from a vendor, and 1 from the Ohio Citizens for Responsible Energy. The comments generally favored retaining the current scope of testing, but they were based on concerns for overall program adequacy, not on the legal and privacy issues discussed herein (see [Attachment 2](#)).

Since 1994, the staff has significantly increased its understanding of the relevant issues concerning the scope of random FFD testing. Now the staff believes it has enough experience to suitably address the issues raised in the IBEW exemption request.

DISCUSSION:

In considering the options to the present random drug and alcohol testing defined in [10 CFR 26.24\(a\)\(2\)](#), the staff examined the effect of each option on the industry, as well as the safety risks associated with testing less than the total population of employees granted unescorted access to the protected area. The staff also considered the balance between personal privacy and public safety.

The statements of consideration published with the final FFD rule (June 7, 1989; 54 FR 24468) contained the following passage:

The Commission is taking this action to significantly increase assurance of public health and safety. The scientific evidence is conclusive that significant decrements in cognitive and physical task performance result from intoxication due to illicit drug abuse, as well as the use and misuse of legal substances. . . . [A]ny involvement with illegal drugs shows that the worker cannot be relied upon to obey laws of a health and safety nature, indicating that the individual may not scrupulously follow rigorous procedural requirements with the integrity required in the nuclear power industry to assure public health and safety.

It is commonly argued that chemical testing for drug or alcohol use constitutes an unwarranted invasion of privacy. However, when public safety issues are at stake, and when legal issues have been resolved, the courts have generally found that chemical testing is fair and warranted. The NRC must decide whether the population of tested workers can be reduced without an impaired worker causing an unsafe condition at the site and increasing risk to public health and safety. This decrease in testing would likely reduce some of the economic burden on licensees.

The proposed amendment to 10 CFR Part 26 detailed in the rulemaking plan would reduce the scope of random fitness-for-duty testing requirements for nuclear power reactor licensees as follows: (1) require random drug and alcohol testing of only those persons with unescorted access to vital areas and (2) eliminate random testing of employees who must physically report to the Technical Support Center or Emergency Operations Facility during an emergency. However, personnel with unescorted access to the protected area will continue to be covered by 10 CFR 26.24(a)(1) for pre-access FFD testing and by (a)(3) for "for-cause" FFD testing.

CONCLUSION:

With respect to FFD testing at power reactors, the Commission's original strategy was to randomly test everyone who had unescorted access to the protected area. As currently stated in 10 CFR 26.10, the goal was to achieve a drug-free workplace and a workplace free of the ill effects of such substances. The assumption was that anyone gaining access to the protected area could cause an accident or potential risk to public health and safety if he or she were unfit for duty because of an impairment. With emphasis still on protecting public health and safety and consideration of privacy issues, the staff has reconsidered the original strategy and now proposes that random testing be limited to personnel who have unescorted access to vital areas.

The NRC staff has reviewed the scope of random FFD testing at power reactors and believes that the regulations in this area can be improved while protecting public health and safety. The current regulations require that access authorization programs only grant unescorted site access to individuals whose backgrounds have been investigated and found satisfactory. The regulations further protect the site by requiring that vital equipment be segregated from non-vital equipment and be secured within vital areas. This process is consistent with the staff's strategy of defense in depth, which, in the case of security, requires passage through two barriers to reach vital equipment but only through one (the protected area barrier) to reach equipment of lesser significance to plant safety. Personnel with unescorted access to the protected area will continue to be covered by the regulations for pre-access and for-cause FFD testing. Therefore, requiring random drug and alcohol testing of only those persons who have unescorted access to vital areas meets the NRC's safety objectives. Furthermore, the staff agrees that the contemplated rule could benefit from additional public comment.

NOTE:

This recommendation does not affect the scope of testing for licensees who possess, use, or transport formula quantities of strategic special nuclear material.

RESOURCES:

Resources to implement this rulemaking (approximately 0.4 FTE per year for two years from NRR and 0.05 FTE per year for two years from OGC) would be made available from resources currently budgeted for this purpose.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objections to its content. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections to its content. The Office of the Chief Information Officer has reviewed this paper for information technology and information management implications and concurs in it.

RECOMMENDATIONS:

That the Commission approve initiation of rulemaking.

That the Commission approve in part the IBEW union's request for exemption from Part 26, so that clerical workers at Diablo Canyon who have unescorted access to the protected area but who (1) do not perform any safety-related duties, and (2) do not have unescorted access to the plant's vital areas, need not be subject to random testing under Part 26. If the Commission approves this recommendation, the staff intends to grant the exemption promptly, before the initiation of the rulemaking, in view of the length of time this request has been pending.

/RA/

William D. Travers
Executive Director for Operations

CONTACTS: Richard Rosano, NRR
(301) 415-2933
Garmon West, Jr., NRR
(301) 415-1044

Attachments: 1. [Rulemaking Plan](#)
2. [Analysis of Public Comments](#)

ATTACHMENT 1

- [Regulatory Issue](#)
- [Current Regulatory Framework](#)
- [How Rulemaking Will Address the Regulatory Problem](#)
- [Rulemaking Options](#)
- [Goals of the NRC](#)
- [Preferred Option](#)
- [Impact on Licensees](#)
- [Benefit/Decrease of Burden](#)
- [Legal Analysis by the Office of the General Counsel](#)
- [Backfit Analysis](#)
- [Issues of Agreement State Implementation](#)
- [Supporting Documents](#)
- [Issuance by EDO or Commission](#)
- [Interoffice Management Steering Group](#)
- [Staff Level Working Group/Concurring Official](#)
- [Public/Industry Participation](#)
- [Resources](#)
- [Schedule](#)

Regulatory Issue

On February 12, 1992, the International Brotherhood of Electrical Workers (IBEW) union filed a request with the U.S. Court of Appeals for the Ninth Circuit that maintenance, warehouse, and clerical workers with unescorted access to the protected area of Diablo Canyon be exempt from random fitness-for-duty (FFD) testing. In a June 11, 1992, decision, the court denied the request, finding that random FFD testing was justified for warehouse and maintenance workers because they enter vital areas--as defined in 10 CFR 73.2, any area that contains vital equipment--and are engaged in safety-related work. However, in its decision, the Court questioned the NRC's requirement for random FFD testing of clerical workers who perform no functions directly related to safety. [IBEW union, Local 1245, v. NRC, No. 90-70647, June 11, 1992.]

On July 20, 1992, John F. Cordes, Jr., NRC solicitor, recommended that the Commission ask the NRC staff to reevaluate the FFD rule, specifically, whether random FFD testing should be required for "clerks, secretaries, or other employees who have unescorted access to a nuclear plant's protected area, but whose own jobs are not directly safety related."

On January 26, 1993, while the staff's review was in progress, the IBEW union submitted a new exemption request. Following extended correspondence with the staff, the IBEW union resubmitted a modified exemption request on December 6, 1993. That request was for an exemption from Part 26 testing for a specific group of clerical workers at Diablo Canyon who have unescorted access to the protected area but who (1) do not perform any safety-related duties and (2) do not have unescorted access to the plant's vital areas. On January 27, 1994, at the staff's request, the Office of the General Counsel (OGC) advised the IBEW union that the exemption request would be held in abeyance pending a decision in response to COMSECY-92-018. That request is still pending. However, in view of the findings of this review, the staff is now recommending that the Commission approve the IBEW union's exemption request, in part.

Current Regulatory Framework

Currently, 10 CFR 26.2(a) applies the FFD program, in part, to "all persons granted unescorted access to nuclear power plant protected areas," and 10 CFR 26.24(a)(2) applies random, unannounced drug and alcohol testing to this same population. The regulation does not allow exceptions for any categories of workers or for the level-of-access authorization.

How Rulemaking Will Address the Regulatory Problem

The proposed amendment would (1) require random drug and alcohol testing of only those persons with unescorted access to vital areas and (2) eliminate testing for employees who must physically report to the Technical Support Center (TSC) or Emergency Operations Facility (EOF) during an emergency. A preliminary draft of the amendment follows:

26.24 Chemical and alcohol testing.

(a)(2): Unannounced drug and alcohol tests imposed in a statistically random and unpredictable manner so that all persons in the population subject to testing have an equal probability of being selected and tested. For nuclear power plant personnel, only those individuals who have unescorted access to vital areas shall be tested. The tests must be administered so that a person completing a test is immediately eligible for another unannounced test. As a minimum, tests must be administered on a nominal weekly frequency and at various times during the day. Random testing must be conducted at an annual rate equal to at least 50 percent of the workforce.

Personnel with unescorted access to the protected area will continue to be covered by the requirements for pre-access and for-cause testing in 10 CFR 26.24 (a)(1) and (a)(3), respectively. The NRC's FFD testing program will continue to include its employees who physically report to a licensee's TSC or EOF during an emergency.

In the course of this contemplated rulemaking, the following issues have been identified:

- The majority of industry comments (Attachment 2, Issue 6) indicated that risk or vulnerability will increase if the random drug testing scope is changed. Because random drug testing is only one of several measures to control substance abuse, the staff believes risk or vulnerability will remain unchanged or will not increase to any significant degree. However, the staff acknowledges that this is an important issue that must be addressed and revisited during the next public comment period, including a request for empirical data regarding the effect on risk or vulnerability.
- Administrative personnel may have unescorted access to vital areas but may not perform any safety-related work in vital areas. Questions are anticipated regarding how an impaired worker who does not perform any safety-related work in vital areas (e.g., a clerical worker) could nonetheless have such an impact upon radiological health and safety that random FFD testing is justified for these workers. The staff believes that random FFD testing is justified because such a worker in an impaired state could inadvertently (e.g., by falling or giving wrong information) or deliberately harm or activate equipment in vital areas.
- The current regulation, 10 CFR 26.24(a)(2), requires random FFD testing for employees who must physically report to the TSC or EOF during an emergency. If the TSC or EOF is not located in a vital area, the proposed amendment would eliminate random FFD testing for these individuals. One could argue that the proposed amendment might result in an impaired individual reporting to the TSC or EOF. However, these individuals would make decisions with others rather than alone. Further, these individuals would continue to be subject to the requirements for pre-access and for-cause FFD testing. In addition, managers and supervisors would also continue to receive required training in behavioral observation techniques for detecting degradation in performance, impairment, or changes in employee behavior.
- The staff believes for the following reasons certain FFD requirements must continue to apply to individuals who are only granted unescorted access to the protected area:
 1. Workers who must be granted access to vital areas during emergencies cannot fulfill FFD requirements (e.g., pre-access testing) at the time of an emergency. Therefore, FFD requirements for these individuals provide some level of assurance that they will be able to perform their duties safely in a vital area if called to perform them during an emergency.
 2. Impaired workers who perform work in the protected area that could indirectly affect safety may show significant decreases in cognitive and physical task performance owing to illegal drug use and misuse of legal substances.

This decrease in performance could affect workers' ability to perform their job in a manner that ensures public health and safety. However, the consequences of work in non-vital areas are considered to have a lesser significance to plant safety than work in vital areas.

3. Impaired workers who perform non-safety-related work in the protected area may intentionally or unintentionally adversely affect plant operations (e.g., giving wrong information in verbal exchanges with the control room).
- The public confidence issue may be raised regarding relaxation of random drug-testing requirements against a background of congressional focus on reducing drug usage.

The staff will develop answers to these issues through exchanges with stakeholders.

Rulemaking Options

1. Maintain the status quo.

One alternative to amending the regulation would be to retain the current scope of testing, that is, randomly test everyone who has unescorted access to the plant protected area.

2. Define the scope of testing by the category of worker.

A second alternative would exclude certain workers (e.g., clerical, administrative). The advantage of eliminating certain clerical, administrative, and maintenance workers from the scope of random FFD testing is that it would remove from the testing program a large number of employees who serve in support roles and perform no safety-related work.

Many licensees define the population of tested employees to include many not required to be tested by 10 CFR Part 26. In doing this, these licensees include in the pool of random testing administrative and other support personnel that the licensees determine may have an impact on safety. If a licensee takes a more-stringent approach than the approach given in 10 CFR Part 26, testing could still take place, regardless of the NRC's action to reduce the scope of testing.

3. Define the scope of testing by the level of unescorted access.

A third alternative, the preferred option, would exclude from random testing all workers with unescorted access only to a protected area and would test only workers who have unescorted access to vital areas. To present an imminent threat to public health and safety, whether intentionally or unintentionally, an individual must have access to systems vital to safe operation of the facility, that is, equipment contained within "vital areas." The staff distinguishes vital equipment from non-vital equipment and requires that vital equipment have more assurance against tampering and unauthorized manipulation. The staff uses the concept of vital areas to identify areas that require greater security, including additional barriers, locks, alarms, and access controls by use of special access lists and keycards. By defining the scope of random testing by the level of access, the NRC would limit the privacy issues to those employees whose work requires them to enter areas containing equipment vital to the safe operation of the facility, and who often work alone in these areas.

For a TSC or EOF that is not located in a vital area, this option would eliminate random testing currently required by 10 CFR 26.24(a)(2) for employees who must physically report to the TSC or EOF during an emergency. Option 3 explicitly states that access to vital equipment is the defining principle, and limits testing to those individuals whose proximity to vital equipment could pose a hazard if the individual is performing duties while under the influence of drugs or alcohol.

The staff recommends choosing this option based on a balance between safety and privacy issues. Selecting this option would provide an adequate level of protection for vital equipment while preserving the privacy rights of individuals who do not have access to vital areas. Selecting this option also would decrease regulatory burden.

The NRC's random FFD testing program will continue to include those of its employees who physically report to a licensee's TSC and EOF during an emergency. This is more conservative than the approach proposed by the staff for licensee employees. This disparity may lead NRC to reconsider its policy on FFD testing for those employees requiring access only to non-vital area.

4. Define the scope of testing by the type of work.

A fourth alternative would test all workers who have safety- or security-related jobs. By limiting the scope of random FFD testing to those workers who have safety- or security-related jobs, the NRC could satisfy some of the privacy and safety issues identified in each of the options previously discussed.

It is more difficult to define the type of work than it is to group employees by access levels. For example, certain workers in a category may perform safety-related work, while other workers in the same category may not; however, as resource needs shift, this distinction may become unclear.

5. Retain the current testing scope but allow use of alternate testing in lieu of urinalysis for certain groups of workers (e.g., clerical and administrative).

A fifth alternative would use different testing methodologies for different groups of employees and would also present some of the advantages of each option mentioned above. One alternative approach is a performance test, which focuses directly on the

behavior at issue (i.e., impairment). This approach minimizes the invasion of privacy since body fluids are not collected. The test can be adjusted to fit the type of work performed by the employee. Other technical methodologies exist, and more are being developed to allow a wider range of testing techniques.

Approval of alternate testing would require the NRC to review a wide range of approaches and to be open to reviewing new methodologies as they evolve. A disadvantage of alternate testing is that some of the methodologies have not yet been widely approved by the scientific community because of controversies concerning reliability and reproducibility. Thus, these tests may not be legally defensible.

It is commonly argued that chemical testing for drug or alcohol use constitutes an invasion of privacy. However, when public safety issues are at stake, and when legal issues have been resolved, the courts have generally found that this type of chemical testing is fair and warranted. The NRC must decide whether the population of randomly tested workers can be reduced without increasing risk to public health and safety from an impaired worker creating an unsafe condition at the site. This decrease in testing would likely reduce some economic burden on licensees.

Goals of the NRC

The rulemaking options were also considered relative to the following goals of the NRC: maintain safety, decrease unnecessary burden, increase efficiency and effectiveness, and increase public confidence.

GOALS OF THE NRC	OPTIONS				
	1	2	3	4	5
	Status Quo	Category of Worker	Level of Access	Type of Work	Alternate Testing
Maintain Safety	X	X	X	X	X
Decrease Unnecessary Burden		X	X	X	
Increase Efficiency and Effectiveness		X	X	X	
Increase Public Confidence					

All of the options would maintain safety. Options 2, 3, and 4 would decrease unnecessary regulatory burden because these options would allow a reduction in the number of tests conducted and the number of files maintained. Options 2, 3, and 4 would increase efficiency and effectiveness. All three options would provide greater efficiency and effectiveness in implementation of the FFD program at a reduced cost to licensees. None of the options are likely to increase public confidence.

Preferred Option

Although Options 3 and 4 have similar merits (e.g., reduce regulatory burden and increase efficiency and effectiveness) the staff recommends Option 3 because (1) the level of access can be easily defined and (2) the level of access is "inspectable."

Impact on Licensees

The proposed amendment would present an opportunity for decreasing the burden on licensees. There would be no impact on those licensees who wish to continue random testing for all personnel who have unescorted access to the protected area. There would be some impact on licensees who voluntarily choose to reduce the scope of personnel subject to random testing required by Part 26, including changes in policy, procedures, and training.

The staff will continue to evaluate, through exchanges with stakeholders and a required regulatory analysis, the impact on licensees of all five options, including cost estimates (especially reductions).

Benefit/Decrease of Burden

If Option 3 is selected, workers must still be tested, necessitating retention of testing facilities. However, there will be an overall decrease of burden realized by the reduction in both the total number of tests conducted and the number of files maintained. The proposed amendment would also benefit the licensee and the NRC by reducing the number of similar exemption requests to Part 26 testing for nuclear power plant personnel who do not have unescorted access to the plant's vital areas.

Legal Analysis by the Office of the General Counsel

The purpose of this rulemaking, as understood by OGC, is to provide nuclear power plant licensees with the option of reducing the scope of plant workers who are subject to random FFD testing under 10 CFR Part 26, by permitting the exclusion from random testing of all workers who have unescorted access only to the protected area, but not to vital areas. Those workers who are authorized to have unescorted access to vital areas would continue to be subject to random FFD testing. The

rulemaking plan was prepared in response to the Commission's August 18, 1992, staff requirements memorandum (SRM), which directed the staff to reexamine the justification for imposing random FFD testing on workers who do not perform any direct safety function. The Commission's direction responded to a decision by the U.S. Court of Appeals for the Ninth Circuit in *International Brotherhood of Electrical Workers, Local 1245 v. NRC*, No. 90-70647 (June 11, 1992) (IBEW), in which the court questioned whether the NRC had articulated a sufficient health and safety rationale for random FFD testing of clerical and other workers who do not perform functions directly related to safety. In response to the SRM, the staff prepared a Federal Register notice requesting public comment on five options for addressing the issue raised by the Court in IBEW. See 59 FR 24373 (May 11, 1994). The rulemaking plan for amending Part 26 restates the five options that were first presented in the Federal Register notice.

The five options presented by the staff in the rulemaking plan represent an appropriately broad range of choices for addressing random FFD testing. OGC agrees with the staff that maintaining the existing rule without change (Option 1) is not the preferable choice, despite the nuclear power plant licensees' support of this option in their comments on the Federal Register notice. OGC believes that a rulemaking addressing the staff's preference (Option 3) should envelop the issue raised by the court in the IBEW decision. OGC notes that to adequately address the issue raised in the IBEW decision, the staff will have to develop a reasonable rationale that explains how an impaired worker who does not perform any safety-related work in a vital area (e.g., a clerical worker) could have such an impact upon radiological health and safety that random FFD testing is justified for this worker. Conversely, the staff will have to develop a reasonable rationale (with appropriate reference to empirical data, if any) explaining why such impaired workers in the protected area would not have an adverse effect on radiological health and safety in order to justify removing the requirement for random chemical testing for these workers. In this regard, it should be noted that the original FFD rule (54 FR 24468, June 7, 1989) appears to have been adopted primarily to ensure that workers will be able to "safely and competently perform their duties." *Id.* at 24468 (first column); see also 24469, Section 3.0, "Impairment vs. Reliability"; 24470-72, Section 4.0, "Scope of Rule." Thus, the original FFD rule was based on preventing worker impairment. A rationale for testing these workers, which is based upon avoiding internal threats to the vital area, would represent a different ground for justification. If this new rationale is relied upon for this rulemaking, substantial additional information must be developed to explain why other internal threats need not be protected against, and why other less-intrusive methods for screening personnel would not be effective.

The regulatory analysis for the proposed rule should evaluate the five options identified in the rulemaking plan (and that were the subject of the Federal Register notice). The evaluation of the alternatives should focus on achieving the radiological health and safety goals of the NRC with minimum intrusion upon the civil liberties or privacy interests of the workers. Although information on costs (particularly cost decreases) associated with the options must be presented, in accordance with the Commission's regulatory analysis guidelines (NUREG/BR-0058, Revision 2, November 1995), OGC cautions that it may not be appropriate to rely upon burden reduction as a rationale for adopting one of the options, inasmuch as the nuclear power plant licensees appear to be satisfied with the current rule and do not support any of the alternatives identified in the Federal Register notice.

The proposed rule would require preparation of an environmental assessment, as it appears that there are no categorical exclusions in 10 CFR 50.51(c) that would apply to the proposed rule.

It is unclear whether the proposed rule is a "major rule" under the Small Business Regulatory Enforcement Fairness Act, inasmuch as there is insufficient information to determine whether the rule is likely to result in a \$100 million impact upon nuclear power plant licensees and their contractors. If the proposed rule is not a major rule, then the statutorily mandated 60-day period preceding effectiveness of major rules is not applicable.

The proposed rule would result in a decrease in the records of FFD tests that licensees would be required to maintain. The staff will determine whether the existing Office of Management and Budget (OMB) guidance will require an OMB review of the proposed rule.

In accordance with the National Technology Transfer and Advancement Act of 1995, P.L. 104-113, the staff should determine whether there are any consensus codes and standards with respect to the scope of nuclear power plant personnel subject to FFD testing.

In conclusion, OGC has determined that there are no known bases for legal objection to the contemplated rulemaking.

Backfit Analysis

Because the proposed amendment would serve as an opportunity for licensees who wish to reduce the scope of personnel subject to FFD testing under 10 CFR Part 26, the staff does not believe it will constitute a backfit as defined in 10 CFR 50.109(a)(1). If a licensee chooses the option detailed in the proposed amendment, prior NRC review and approval would not be necessary. Licensees who wish to continue random FFD testing for personnel who are granted unescorted access to the protected area are free to continue this testing in accordance with the proposed rule.

Issues of Agreement State Implementation

The proposed amendment would not apply to facilities or licensees regulated by Agreement States.

Supporting Documents

A regulatory analysis will be prepared. An environmental assessment will also be prepared in compliance with 10 CFR 51.22. The staff will determine whether there are any consensus codes and standards with respect to the scope of nuclear power plant personnel subject to FFD testing. The proposed amendment would modify information collection requirements and will require OMB approval.

Issuance by EDO or Commission

The rulemaking will be issued by the Commission.

Interoffice Management Steering Group

Because this rulemaking will affect only NRR licensees, no interoffice management steering group is needed.

Staff Level Working Group/Concurring Official

The staff level working group will consist of Garmon West, Ronald Albert, Dennis Gordon, and Sandra Frattali. The concurring officials will be Richard Rosano, Robert Gallo, and Bruce Boger.

Public/Industry Participation

This rulemaking will use the interactive rulemaking Web site, as appropriate, to encourage participation from the public. Because the nuclear industry is expected to be interested in this rulemaking, a public meeting may be scheduled.

Resources

It is estimated that this rulemaking will require at least 0.4 FTE per year for two years from NRR and 0.05 FTE per year for two years from OGC over a 24-month period to develop the regulation. Resources to complete this rulemaking are budgeted beginning in FY2000.

NRR Lead: Garmon West

NRR Rulemaking Support: Sandra Frattali

OGC Contact: Geary S. Mizuno

Schedule

Briefed CRGR on rulemaking plan	September 14, 1999
CRGR and ACRS review	TBD
Rulemaking plan to the EDO	December 31, 1999
Proposed rule for office concurrence	Six months after rulemaking plan is approved by the Commission
Proposed rule to the EDO	Twelve months after rulemaking plan is approved by the Commission
Proposed rule to the Commission	Thirteen months after rulemaking plan is approved by the Commission
Proposed rule published in Federal Register with a 75-day comment period	Fourteen months after rulemaking plan is approved by the Commission
Publication of final rule	Twenty-four months after rulemaking plan is approved by the Commission

ATTACHMENT 2

ANALYSIS OF THE RESPONSES TO
FEDERAL REGISTER NOTICE (59 FR 24373; May 11, 1994)
ON THE SCOPE OF RANDOM DRUG TESTING

- [Overview](#)
- [SUMMARY OF COMMENTS](#)

- *OTHER COMMENTS RELATED TO THE SCOPE OF RANDOM TESTING*
- *OTHER COMMENTS NOT RELATED TO THE SCOPE OF RANDOM TESTING*

Overview

The NRC received 34 letters in response to the Federal Register notice. All of the letters were docketed and assigned sequence numbers (see table below).

Licensees submitted 20 letters [sequence numbers 9, 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 32]. Five letters were submitted by the International Brotherhood of Electrical Workers (IBEW) union--one from the IBEW union headquarters [sequence number 2] and four from IBEW union chapters [sequence numbers 3, 5, 7, and 8]. Four letters were sent by members of the general public [sequence numbers 4, 6, 13, and 30]. Two letters came from State government offices [sequence numbers 1 and 31]. The Nuclear Energy Institute (NEI) submitted one letter [sequence number 11]. One letter came from a vendor of alternate (performance-based) testing systems [sequence number 33]. One letter came from the Ohio Citizens for Responsible Energy (OCRE) [sequence number 34].

Not all commenters addressed every issue. In answering "yes/no" questions, most commenters also gave a rationale for their answer. In general, the rationales tended to be similar (or even identical) within answer categories ("yes/no").

Generally, the licensees, the Nuclear Energy Institute (NEI), the State offices, and individual members of the public preferred retaining the current testing scope and opposed Options 2, 3, and 4. Response was almost evenly divided on Option 5 (using alternate testing in lieu of urinalysis for certain groups of workers). Of the 25 who responded, 13 said "yes" and 12 said "no." Some respondents submitted information on performance-based alternate testing methods.

The IBEW union commenters generally preferred Option 3 (test only workers with unescorted access to vital areas) and opposed Option 1.

All respondents rejected Option 2[exclude certain groups of workers(e.g., clerical and administrative) who have unescorted access to a protected area but not to vital areas].

In addition to the five testing scope options, the Federal Register Notice asked questions related to random drug testing. Noteworthy responses appear below.

Thirteen licensees, one State office, and the NEI all believed that risk or vulnerability will increase if the random drug testing scope is changed. All five IBEW union commenters believed risk or vulnerability will not change if the random drug testing scope is changed.

Ten licensees, one State office, and the NEI expressed concerns that benefits anticipated from the insider threat study (SECY-93-326) would be reduced if the random testing scope is changed. In effect, relaxing vital area controls would create a single "security area." Workers exempted from random drug testing could then have unescorted access to vital equipment. The NEI and most of the 20 licensees that commented believed this will increase the vulnerability of vital equipment to deliberate and inadvertent acts. Two licensees said they do not believe risks will increase if vital area controls are relaxed.

The NEI and six licensees said that changing the random drug testing scope could have a very significant economic impact. Comments included (1) "without question, the most beneficial result for the industry (both from a safety and cost standpoint) would accrue from implementation of the vital area access control relaxations discussed in SECY-93-326"; (2) "to achieve these relaxations requires the current random testing scope be retained"; and (3) "long-term savings to licensees would, as a minimum, be over ten times that possible by exempting some worker categories from random drug testing."

The IBEW union headquarters and two local IBEW union chapters/councils suggested that a joint committee be formed to study the problem of balancing the need to protect public health and safety against the encroachment into individual privacy expectations. Committee membership would include the NRC (regulator), licensees (management), and workers (unions).

COMMENTERS AND SEQUENCE NUMBERS (In response to FRN 59 FR 24373 of May 11, 1994)

PKG	RECEIVED	COMMENTER
1	28 Jun 94	Illinois Dept. of Nuclear Safety, Springfield, IL
2	28 Jun 94	IBEW Headquarters, Washington, DC
3	25 Jul 94	IBEW System Council U-3, Wannamassa, NJ
4	25 Jul 94	Mr. & Mrs. R. L. Przybyla, Morro Bay, CA
5	26 Jul 94	IBEW Local 1455, St. Louis, MO
6	26 Jul 94	Mr. T.S. Gilbride, Grover Beach, CA
7	01 Aug 94	IBEW Local 1245, Walnut Creek, CA
8	05 Aug 94	IBEW System Council U-4, Boynton Beach, FL
9	08 Aug 94	Public Service Co. of Colorado, Platteville, CO
10	08 Aug 94	Consumers Power Co., Jackson, MI

11	08 Aug 94	Nuclear Energy Institute, Washington, DC
12	08 Aug 94	Washington Public Power Supply System, Richland, WA
13	09 Aug 94	Mr. Richard Boyer III, Carlisle, PA
14	09 Aug 94	Entergy Operations, Jackson, MS
15	09 Aug 94	Niagara Mohawk, Lycoming, NY
16	09 Aug 94	Florida Power & Light Co., Juno Beach, FL
17	11 Aug 94	Georgia Power Co, Birmingham, AL
18	11 Aug 94	Southern Nuclear Operating Co., Birmingham, AL (Farley)
19	12 Aug 94	Detroit Edison, Newport, MI
20	12 Aug 94	PECO Energy Co., Wayne, PA
21	15 Aug 94	Commonwealth Edison, Downers Grove, IL
22	16 Aug 94	Virginia Power, Glen Allen, VA
23	17 Aug 94	Indiana Michigan Power Co., Columbus, OH
24	17 Aug 94	Baltimore Gas & Electric Co, Lusby, MD
25	19 Aug 94	Duquesne Light Co., Shippingport, PA
26	19 Aug 94	Northern States Power Co., Minneapolis, MN
27	19 Aug 94	Pacific Gas & Electric, San Francisco, CA
28	19 Aug 94	Duke Power Co., Charlotte, NC
29	24 Aug 94	North Atlantic Energy Service Corp., Seabrook, NH (Seabrook)
30	31 Aug 94	Ms. Debra L. Pendilla, Wilmington, CA
31	6 Sep 94	Pennsylvania Public Utility Commission, Harrisburg, PA (Seabrook)
32	8 Sep 94	Yankee Atomic Electric Co., Bolton, MA
33	12 Sep 94	ESSEX Corp, Columbia, MD
34	5 Oct 94	Ohio Citizens for Responsible Energy, Inc., Mentor, OH

SUMMARY OF COMMENTS

ISSUE 1 (OPTION 1). *Should the Commission retain the current scope of the random drug testing requirements in 10 CFR Part 26, which requires that all persons granted unescorted access to protected areas at nuclear power plants be subject to random drug testing?*

Of the 28 commenters addressing this issue,

22 commenters said "yes."

Licensees. . . .10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, and 29
State offices. . . 1 and 31
Public. 4
NEI.11

6 commenters said "no."

Licensees. . . . 32
IBEW. 2, 3, 5, 7, and 8

ISSUE 2 (OPTION 2). *Should the Commission revise the scope of the 10 CFR Part 26 random drug testing requirements to exclude from random drug testing certain groups of workers (e.g., clerical, administrative) who have unescorted access to protected areas but not to vital areas?*

Of the 21 commenters addressing this issue,

all said "no."

Licensees. . . .12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 32
State offices. . . 1 and 31
IBEW. 7
NEI.11

ISSUE 3 (OPTION 3). *Should the Commission revise the scope of the 10 CFR Part 26 random drug testing requirements to limit random drug testing to only those workers who have unescorted access to vital areas of nuclear power plants?*

Of the 25 commenters addressing this issue,

6 commenters said "yes."

Licensee. . . . 32
IBEW2, 3, 5, 7, and 8

19 commenters said "no."

Licensees . . .12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, and 29
State offices .1 and 31
NEI 11

ISSUE 4 (OPTION 4). *Should the Commission revise the scope of the 10 CFR Part 26 random drug testing requirements to limit random drug testing to workers whose jobs involve safety- or security-related functions regardless of whether these workers have unescorted access to protected areas?*

Of the 24 commenters addressing this issue,

3 commenters said "yes."

IBEW7 and 8
Public6

21 commenters said "no."

Licensees . . . 10, 12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 32
State offices. .1 and 31
NEI11

ISSUE 5 (OPTION 5). *Should the Commission revise the scope of the 10 CFR Part 26 random drug testing requirements to allow use of alternative testing methods in lieu of urinalysis for certain groups of workers who have unescorted access to protected areas (but not to vital areas) only because their normal workstations are within a protected area of the nuclear power plant. These methods could include performance-based testing, even though there are current technical limitations-- primarily in varying degrees of detectability, reliability, sensitivity, and accuracy. (See also Issue 10.)*

Of the 25 commenters addressing this issue,

13 commenters said "yes."

Licensees . . . 10, 16, 17, 18, 22, 24, and 28
IBEW 2, 5, and 8
NEI11
Vendor33
OCRE 34

12 commenters said "no."

Licensees . . . 12, 14, 19, 20, 21, 23, 25, 26, 27, 29, and 32
State offices . 31

ISSUE 6. *For Options 2 through 5, what are the potential effects on risk to public health and safety or on the vulnerability of nuclear power plants resulting from accidental acts and deliberate acts such as sabotage or vandalism? Will vulnerability or risk increase or decrease to any significant degree, or will they remain unchanged?*

Of the 20 commenters addressing this issue, 15 said that some increased risk or vulnerability will result or is possible; 3 believed that Option 3 should not increase the possibility of nuclear accidents or risk of sabotage or vandalism; 1 said risk or vulnerability will be unchanged; and 1 said no increased risk to the plant will result. The comments can be summarized as follows:

- Increased risk or vulnerability. Thirteen licensees(10, 12, 14, 15, 16, 17, 18, 19, 20, 22, 24, 25, and 28), one State office(31) and NEI(11) all believed some increase will result or is possible. Potential consequences noted are: implying that NRC is less concerned about substance abuse; precluding licensees from adopting the relaxed vital area (VA) access controls evolving from the insider study; increasing the vulnerability of balance-of-plant systems and emergency controls located in protected areas; increasing the probability of workers in protected areas having diminished judgment and diminished motor skills; and making questionable a worker's dependability and effect on other workers.
- Unchanged risk or vulnerability. Three IBEW union commenters(2, 3, and 5) said Option 3 should not increase the possibility of nuclear accidents or risk of sabotage or vandalism. One licensee(32) believed vulnerability or risk will be unchanged, because random drug testing is but one of several measures to control substance abuse. One IBEW union commenter(8) saw no increased risk to the plant from any act, whether inadvertent or deliberate.

ISSUE 7. *What would be the expected effect on the need for random drug testing under Options 2 through 5 if vital area*

access controls were reduced (e.g., allowing certain vital area doors to normally be unlocked, but be capable of being remotely locked on demand in the event of a security contingency and generating an alarm if a vital area door is opened without an authorized keycard)?

Comments from the 14 commenters (12 licensees, 1 State office, and NEI) that addressed this issue can be divided into three groups:

- Administrative burdens of licensees would increase for maintaining access lists, random testing pools, and so forth. Selection errors would increase as workers were inadvertently left out of, or wrongly included in, testing pools. Concerns would increase about the trustworthiness of non-tested workers who have access to the protected areas. Reducing vital area access controls, in conjunction with reducing the scope of random drug testing, would increase the risk of workers inadvertently or deliberately damaging or manipulating equipment affecting plant operation. Random drug testing is intended to identify and correct potential hazards before they occur, or as soon thereafter as possible. The acts of responding to alarms and remotely locking doors will address the hazards only when, or after, the dangerous situation has already occurred. (Licensees: 12, 14, 16, 17, 18, 20, 22, 24, 28, and 29; State office: 31; and NEI: 11)
- Without question, the most beneficial result for the industry (both from a safety and cost standpoint) would accrue from implementation of the vital area access control relaxations discussed in SECY-93-326. To achieve these relaxations requires that the current random testing scope be retained. A safety enhancement would be easier and quicker access to vital equipment in support of emergency plant operations and transient situations. The long-term savings to a licensee would, as a minimum, be more than 10 times that available from exempting some categories of people from the random test program. (Licensees: 16, 17, 18, 22, and 24; and NEI: 11)
- We find no persuasive link between any of the options and relaxation of current controls for access to vital areas. Random drug testing is but one element of the FFD program, which provides a more-than-adequate level of protection. Access to vital areas and protected areas should not be used to determine who is tested. (Licensees: 19 and 32)

ISSUE 8. *Does substance abuse increase the probability of a person committing a deliberate act of sabotage or vandalism? These acts might be caused by indirect influences of drugs on a person's attitude or susceptibility to being influenced by others. What data exist to show a relationship between substance abuse and deliberate acts? Is random drug testing an appropriate means to control the risk of deliberate acts associated with substance abuse and, at the same time, not encroach unreasonably into individual privacy expectations?*

Of the 17 commenters that addressed this issue, the rationales and phrasing differed, but the viewpoints of 16 of the commenters could be divided into two general groups, as below; The viewpoint of the remaining commenter was that plant security is the largest deterrent to introducing illegal substances into the plant, not the FFD program. None of the commenters submitted supportive data, and several said they knew of no data on either side of this issue.

- Substance abuse is perceived to increase the risk of sabotage and vandalism. Detrimental effects include impairment of judgment and motor skills, and vulnerability to coercion or influence. Commenters' opinions were based on experience and observation. Since acceptance of employment in the nuclear field carries diminished expectations of privacy, random chemical tests are not unreasonable. (Licensees: 12, 14, 16, 17, 18, 21, 22, 24, 25, 26, and 28; State office: 31; NEI: 11; and individual commenter: 30)
- Other factors (greed, anger, mental stress, adverse employment actions) can have a greater influence than substance abuse on increasing the risk of sabotage and vandalism. Random drug testing, by itself, would not be sufficient to deter sabotage or vandalism. Random drug testing is just one part of a comprehensive program that includes behavioral observation, for-cause testing, background investigations, criminal history searches, and psychological evaluations. Most positive drug test results occur during inprocessing, before access is granted. (Licensees: 19, 20, and 32)
- One IBEW union commenter(8), not placed in either group, said that plant security is the largest deterrent to introducing illegal substances into the plant and concluded that the FFD program "has little or no effect on this matter."

ISSUE 9. *Does the Commission's policy in 10 CFR Part 26 deter introduction of illegal substances into protected areas of nuclear power plants? If it does, what aspect(s) of the FFD program create(s) this deterrent effect? If it does not, should the Commission require licensees to implement measures to cause this deterrent effect, and what type of measures should be required? (Information describing the measures and their effectiveness in sufficient detail to show the cause-and-effect relationship between the deterrent measure and the resulting reduction and/or elimination of illegal substances being brought into the workplace would be useful.)*

Of the 23 commenters addressing this issue, 19 said "yes" and 4 said "no." Noteworthy points from each group are summarized below.

- Yes. Random testing is a powerful and effective deterrent to illegal drug and alcohol use and should apply equally to all workers with unescorted access to protected areas and vital areas. The mere chance of being randomly selected for drug testing deters the use and possession of drugs and illegal substances. Since the FFD rule was implemented, recorded drug abuse at nuclear power plants has declined from 1.1 percent to 0.03 percent, showing that the random selection process is an effective means for detection and deterrence of drugs. NUREG/CR-5758 reports that out of 156,730 random tests, only 696 for-cause tests were administered (these 696 tests included postaccident tests along

with supervisor-invoked tests). Nuclear utilities have been remarkably successful in establishing and maintaining a drug-free workplace, and random testing has been the single most-important success factor. Most workers found to have been abusing drugs or alcohol were discovered through random testing. Changes that eliminate or single out segments of workers or alter the scope of testing will set the stage for casual use of drugs and alcohol by workers who are not afraid of random testing. Further, it will open the door for persons inclined to deal in the sale of drugs and related paraphernalia to hold positions on site without being subject to random testing. (Licensees: 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 28, and 29; State offices: 1 and 31; NEI: 11; individual: 4)

- No. There is no certainty that random drug testing has a deterrent effect. Well-screened and well-trained employees are normally being observed by supervisors and co-workers; such observation is the strongest deterrent to drug and alcohol abuse. The other screening programs are sufficient to deny access to workers who pose risks to the plant. (IBEW: 2 and 5; licensee: 32)
- No. Random testing has not been proved to be a cost-effective means for removing impaired persons from the workplace. The FFD program "has little or no effect on this matter." (IBEW: 8)

ISSUE 10. *Should the Commission continue to investigate new testing methods that could be used for all workers who have unescorted access to protected areas? What are some methods that might be acceptable and effective alternatives to the existing approach? For proposed methods, please present data that establish accuracy (i.e., test's error rate), specificity (i.e., degree to which the test can measure what it's supposed to measure), reliability (i.e., the precision with which the test can be repeated and the consistency of test results), and similar supporting parameters. The Commission is specifically interested in data on the validity of performance testing measures.*

All of the 15 commenters addressing this issue said "yes." (Licensees: 14, 16, 17, 18, 19, 20, 21, 22, 24, 28, 31, and 32; NEI: 11; IBEW: 8; and individual: 13) Noteworthy points follow.

- A promising method is computer dexterity testing, which uses a baseline test and a history to accurately detect true impairment--legal (e.g., prescription medicine) or illegal.
- The "hair tests" for drug use are historical in nature and do not indicate the impairment an individual may have had at the time of the test.
- There are on-the-spot drug screen test devices for saliva and urine that should be allowed for use to promptly ensure fitness for duty immediately before obtaining unescorted access. One device gives an assay with visual test results in 10 minutes for the National Institute on Drug Abuse (NIDA) 5-drug panel.
- Performance testing should be investigated as an alternative to drug testing. Computer-based performance testing has been used by large corporations for some time. Some advantages of performance-based testing are detection of problems that are unrelated to substance abuse (e.g., death in the family, fight with spouse, illness, and fatigue); workers can be tested quickly and easily; performance problems can be identified at that time; inexpensive once the program is established; and the "individual-rights" question is eliminated. Corporations currently using such testing report that it is very effective in detecting workers likely to perform poorly, since it is virtually impossible to "cheat" when setting the initial baseline to which subsequent results are compared.
- Any methodology considered should meet the highest requirements for accuracy, specificity, and reliability.

OTHER COMMENTS RELATED TO THE SCOPE OF RANDOM TESTING

- Health and safety considerations for the general public should, in all cases, take precedence over individual issues of worker privacy. People who work in the nuclear industry cannot reasonably expect regulatory exemption from random testing (arguing invasion of privacy) after they have already willingly submitted to significant privacy encroachments inherent to the nuclear access authorization screening process. (Licensee: 26)
- Since implementation of the FFD rule, we have noted improved work performance. We do not attribute these improvements to the random drug testing program alone; however, a reduction in the random drug testing program may adversely affect these results. Quality assurance is good business and helps maintain a high level of plant safety. (Licensee: 27)
- For-cause testing is the most reliable and most valid. More than 90 percent of the for-cause tests have been positive; fewer than 1 percent of random tests have been positive. Also, with for-cause testing, there is a suspicion of impairment--an element that is totally missing from random urine testing. (IBEW: 7) *The NRC staff notes that the actual for-cause positive test rate has varied between 16.09 percent and 29.23 percent over the time the FFD rule has been in effect. (NUREG/CR-5758, Volumes 1 through 5)*
- We recommend that a committee be formed to study the positive and negative effects of the regulations in 10 CFR Part 26 on the workplace. The committee would comprise the NRC (regulator), licensees (management), and workers (unions). All three groups would work toward developing the safest work environment possible, but would also take into consideration employer costs, employee privacy, and working conditions. (IBEW: 2, 3, and 5)

OTHER COMMENTS NOT RELATED TO THE SCOPE OF RANDOM TESTING

- NEI and eight licensees recommended that the Commission consider further reductions in the random testing rate. (NEI: 11; licensees: 12, 14, 16, 17, 18, 22, 24, and 28)
- NEI and six licensees recommended that the Commission address two issues that the NRC staff has addressed in SECY-95-262:

Evaluate the FFD rule for plants going through the decommissioning process. The only program scope consideration should be centered on persons with unescorted access to spent fuel areas in which fuel elements, if sabotaged, could result in a significant radiological hazard to the public health and safety. Personnel with unescorted access to independent spent fuel storage installations (ISFSIs) would not be subject to the rule and this should also be explicitly stated. (NEI: 11; licensees: 16, 17, 18, 22, 24, and 28)

Authorize licensees to allow entry after specimen collection but before determining results. (NEI: 11; licensees: 16, 17, 18, 22, 24, and 28) Allow licensees to grant access to protected areas for a temporary period after collection of a pre-access test specimen. Temporary access would not exceed 10 days and would be allowed only for workers who had been drug free when tested in the past. This would result in significant cost savings while increasing productivity. (Licensee: 14)