

March 10, 2003

MEMORANDUM TO: Chairman Meserve  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield

FROM: William D. Travers */RA/*  
Executive Director for Operations

SUBJECT: FITNESS-FOR-DUTY ENHANCEMENTS TO ADDRESS CONCERNS  
REGARDING FATIGUE OF NUCLEAR FACILITY SECURITY FORCE  
PERSONNEL - DRAFT ORDER AND COMPENSATORY MEASURES  
FOR POWER REACTOR LICENSEES

This memorandum describes the actions the NRC has taken and intends to take in implementing the Commission's directions in Staff Requirements Memorandum (SRM) titled "Staff Requirements-COMSECY-02-0066-Fitness for Duty Enhancements to Address Concerns Regarding Fatigue of Nuclear Facility Security Force Personnel-Draft Order and Compensatory Measures for Power Reactor Licensees," dated December 26, 2002. The SRM directed the staff, in part, to solicit discussions from a broad range of interested external stakeholders, including the industry. The SRM also directed the staff to extend the work hour limits of this Order promptly to security personnel at other facilities (decommissioning reactors, independent spent fuel storage installations (ISFSIs), Category I fuel cycle facilities, gaseous diffusion plants (GDPs), and Honeywell). This memorandum forwards a standard cover letter to power reactor licensees (Attachment 1) requiring implementation of a draft Order (Attachment 2) and Compensatory Measures (CMs) (Attachment 3) that the NRC intends to issue to power reactor licensees to address concerns regarding fatigue of security force personnel.

At two public meetings held on January 23, 2003, and February 21, 2003, the staff met with a broad range of external stakeholders (e.g., licensees, the Nuclear Energy Institute, nuclear security officers, union representatives, the Project on Government Oversight, the Union of Concerned Scientists, the Nuclear Control Institute, the news media, law firms, and members of the public) to discuss the draft Order and CMs related to fatigue of nuclear facility security force personnel.

CONTACTS: Garmon West, Jr., NSIR  
(301) 415-0211

David Desaulniers, NRR  
(301) 415-1043

The detailed comments by stakeholders from the January 23, 2003, and February 21, 2003, public meetings are provided in Attachments 4 and 5, respectively. In general, the industry reiterated its position that an Order is not required. However, the industry would support extending Generic Letter (GL) 82-12, "Nuclear Plant Staff Worker Hours," to cover security personnel. Nuclear security officers offered a range of comments. Some officers wanted no regulation of voluntary overtime, others requested greater limits on work hours. Members of the public expressed concerns that the proposed Order and CMs may have too many loopholes that may allow licensees to continue to rely on excessive overtime. Both the industry and members of the public acknowledged improvements in the staff's proposal during the second meeting.

The staff evaluated stakeholder comments against several objectives and adjusted the proposed CMs. The objectives were to (1) cover all members of the security force required to implement the licensee's physical security plan, (2) provide work hour controls for the individuals at each site to cover acute fatigue concerns, (3) provide work hour controls for the overall nuclear facility security force to address chronic long-term fatigue concerns, (4) ensure a sufficient break between work periods to mitigate the effects of fatigue, (5) limit the number and duration of deviations from the work hour controls, (6) require monitoring and control of individual work hours, (7) provide limits on work hours for planned and unplanned plant and security system outages, (8) exempt licensees from work hour controls during declared emergencies, and (9) require a process to address self-declarations of unfitness for duty due to fatigue.

The staff has completed its evaluation of the stakeholder comments and has revised the previously submitted draft Order and CMs. A side-by-side comparison highlighting the changes between the draft CMs proposed in COMSECY-02-0066 and the current draft CMs, is provided in Attachment 6.

The proposed CMs incorporate the NRC's intentions regarding individual work hour controls and the concept of a nominal work week contained in GL 82-12 in a manner that is enforceable. In addition, the CMs provide the NRC's expectations regarding the appropriate use of overtime during plant outages, increased threat conditions, and declared plant emergencies.

The proposed individual work hour limitations are identical to those expressed in GL 82-12 with the exceptions of increasing the limit on the number of hours worked during a 48-hour period from 24 hours to 26 hours and increasing the break between work periods from 8 hours to 10 hours.

The staff also proposed group hour limits to define the staff's expectations for a nominal work week that are expressed in GL 82-12. For normal plant operations, the work hours for personnel covered in the scope of the CMs would be limited to 48 hours per week on average. For planned plant outages and planned security system outages, the limit would be 60 hours per week on average. There are no group limits for increased threat conditions and there are no individual or group limits for declared emergencies. The use of elevated overtime for planned outages or increased threat conditions is limited to 120 days. The staff proposed limitation on group hours during normal conditions and planned outages to ensure that fatigue would not adversely impact security force readiness during increased threat conditions. The

staff proposed few limitations for increased threat conditions or declared emergencies to provide licensees maximum flexibility when these resources are most critical.

The staff considers it prudent to issue the attached revised draft Order and CMs to address the fatigue issue for security personnel in a more expedient manner than can be afforded by ongoing rulemaking efforts. The staff also intends to submit to the Commission by the middle of May 2003, proposed work hour limits for security personnel that would apply to the following types of licensed facilities: ISFSIs, decommissioning reactors, Category I fuel cycle facilities, GDPs, and Honeywell.

SECY, please track.

Attachments:

1. Standard Cover Letter to Licensees
2. Draft Order
3. Attachment 2 to Draft Order (Compensatory Measures)
4. Detailed Comments From the January 23, 2003, Public Meeting
5. Detailed Comments From the February 21, 2003, Public Meeting
6. Comparison Between Order in COMSECY-02-0066 and Proposed Revised Order

cc: SECY  
OCA  
OGC  
OPA

staff proposed few limitations for increased threat conditions or declared emergencies to provide licensees maximum flexibility when these resources are most critical.

The staff considers it prudent to issue the attached revised draft Order and CMs to address the fatigue issue for security personnel in a more expedient manner than can be afforded by ongoing rulemaking efforts. The staff also intends to submit to the Commission by the middle of May 2003, proposed work hour limits for security personnel that would apply to the following types of licensed facilities: ISFSIs, decommissioning reactors, Category I fuel cycle facilities, GDPs, and Honeywell.

SECY, please track.

Attachments:

1. Standard Cover Letter to Licensees
2. Draft Order
3. Attachment 2 to Draft Order (Compensatory Measures)
4. Detailed Comments From the January 23, 2003, Public Meeting
5. Detailed Comments From the February 21, 2003, Public Meeting
6. Comparison Between Order in COMSECY-02-0066 and Proposed Revised Order

cc: SECY  
 OCA  
 OGC  
 OPA

Distribution:

PUBLIC	PDI-1 R/F	EDO R/F	P. Norry	C. Paperiello	J. Craig
S. Morris	J. Goldberg	M. Rothschild	S. Cole	B. Thomas	D. Skeen
OIP	REGIONS	CFO			

ADAMS Accession No.: **ML030590003**

\*See previous concurrence.

OFFICE	NSIR	Technical Editor*	NSIR	NSIR	NSIR	OGC	OE
NAME	GWest*		CNolan*	JShea*	GTracy*	JGoldberg*	JLuehman*
DATE	02/26/2003	02/26/2003	02/26/2003	02/27/2003	02/28/2003	02/27/2003	02/27/2003
OFFICE	PDI-1/PM	PDI-1/LA	PDI-1/SC	PDI/PD	IEHB	DIPM/D	DLPM/D
NAME	RGuzman*	SLittle*	RLauffer*	SRichards*	DDesaulniers*	BBoger*	JZwolinski
DATE	02/27/2003	02/27/2003	02/27/2003	02/27/2003	02/27/2003	02/28/03	02/ /2003
OFFICE	ADPTF	NRR	NSIR	DEDR	EDO		
NAME	BSheron	SCollins	RZimmerman	WKane	WTravers		
DATE	<del>02/ /2003</del>	02/28/03	02/28/03	03/07/03	03/10/03		

Chief Nuclear Officer  
Licensee Address

SUBJECT: ISSUANCE OF ORDER FOR COMPENSATORY MEASURES RELATED TO  
FITNESS-FOR-DUTY ENHANCEMENTS APPLICABLE TO NUCLEAR  
FACILITY SECURITY FORCE PERSONNEL - PLANT NAME

Dear Mr./Ms. :

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Order that modifies the current license for your facility to require compliance with the specified compensatory measures (CMs). The Order applies to all Addressees listed in Attachment 1 to the enclosed Order. The CMs are listed in Attachment 2 to the enclosed Order. The Commission recognizes that you have voluntarily and responsibly implemented additional security measures following the events of September 11, 2001. However, work hour demands on security force personnel have increased substantially over the past 17 months, and the current terrorist threat environment continues to require heightened security measures. Therefore, the Commission has determined that the security measures addressed by the enclosed CMs should be implemented by licensees as prudent measures to address issues that may arise from fatigue of nuclear facility security force personnel. The Commission has determined that the current threat environment requires that the enclosed Order be effective immediately.

The Order is needed to require prompt, prudent actions to ensure that the appropriate security posture is maintained given the current threat environment. This Order does not obviate the need for licensees to continue to meet the objectives of the current security protective measures level described in NRC Regulatory Issue Summary 2002-12A, "Power Reactors NRC Threat Advisory and Protective Measures System," as promulgated by updated security advisories. Licensees must also continue to maintain the effectiveness of existing security measures taken in response to the events of September 11, 2001, and the Order issued on February 25, 2002. The requirements will remain in effect until the Commission determines otherwise.

The enclosed Order requires responses and actions within specified time frames. Please contact your Licensing Project Manager to facilitate resolution of any issues related to compliance with the requirements in the enclosed Order, or if you have any other questions.

The enclosed Order has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Docket Nos.

Enclosures: 

1. Order
2. Order Attachment 1 - Addressee List
3. Order Attachment 2 - Compensatory Measures Regarding Fitness-for-Duty Requirements Applicable to Security Force Personnel

cc w/enclosures 1 and 2 only: See next page

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
 ) Docket Nos. (as shown in Attachment 1)  
ALL OPERATING POWER REACTOR ) License Nos. (as shown in Attachment 1)  
LICENSEES ) EA-03-038

**ORDER MODIFYING LICENSES  
(EFFECTIVE IMMEDIATELY)**

I.

The licensees identified in Attachment 1 to this Order hold licenses issued by the U.S. Nuclear Regulatory Commission (NRC or Commission) authorizing operation of nuclear power plants in accordance with the Atomic Energy Act of 1954 and Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50. Commission regulations at 10 CFR 50.54(p)(1) require these licensees to maintain safeguards contingency plan procedures in accordance with 10 CFR Part 73, Appendix C. Specific safeguards requirements for reactors are contained in 10 CFR 73.55.

II.

On September 11, 2001, terrorists simultaneously attacked targets in New York, N.Y., and Washington, D.C., utilizing large commercial aircraft as weapons. In response to the attacks and intelligence information subsequently obtained, the Commission issued a number of Safeguards and Threat Advisories to its licensees in order to strengthen licensees' capabilities and readiness to respond to a potential attack on a nuclear facility. On February 25, 2002, the Commission issued Orders to the licensees of operating power reactors

to put the actions taken in response to the Advisories in the established regulatory framework and to implement additional security enhancements which emerged from the NRC's ongoing comprehensive security review.

Work hour demands on nuclear facility security force personnel have increased substantially since the September 11, 2001, attacks and the current threat environment continues to require heightened security measures. The Commission has determined that the security measures addressed by the enclosed compensatory measures are required to be implemented by licensees as prudent measures to address issues that may arise from work-hour related fatigue of nuclear facility security force personnel. Therefore, the Commission is imposing requirements, as set forth in Attachment 2 of this Order, on all licensees of these facilities. These requirements, which supplement existing regulatory requirements, will provide the Commission with reasonable assurance that the public health and safety and common defense and security continue to be adequately protected in the current threat environment. These requirements will remain in effect until the Commission determines otherwise.

In order to provide assurance that licensees are implementing prudent measures to achieve a consistent level of protection, all licenses identified in Attachment 1 to this Order shall be modified to include the requirements identified in Attachment 2 to this Order. In addition, pursuant to 10 CFR 2.202, the NRC finds that in the circumstances described above, the public health, safety and interest require that this Order be immediately effective.

### III.

Accordingly, pursuant to Sections 103, 104, 161b, 161j, 161o, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR Parts 50, 72, and 73, IT IS HEREBY ORDERED, **EFFECTIVE IMMEDIATELY**,



THAT ALL LICENSES IDENTIFIED IN ATTACHMENT 1 TO THIS ORDER ARE MODIFIED AS FOLLOWS:

- A. All Licensees shall, notwithstanding the provisions of any Commission regulation or license to the contrary, comply with the requirements described in Attachment 2 to this Order except to the extent that a more stringent requirement is set forth in the Licensees' security plans. The Licensees shall immediately start implementation of the requirements in Attachment 2 to the Order and shall complete implementation **no later than [insert date 120 days from the date of issuance]**.
- B. 1. All Licensees shall, within **twenty (20) days** of the date of this Order, notify the Commission, (1) if they are unable to comply with any of the requirements described in Attachment 2, (2) if compliance with any of the requirements is unnecessary in their specific circumstances, or (3) if implementation of any of the requirements would cause the Licensee to be in violation of the provisions of any Commission regulation or the facility license. The notification shall provide the Licensee's justification for seeking relief from or variation of any specific requirement.
2. Any Licensee that considers that implementation of any of the requirements described in Attachment 2 to this Order would adversely impact safe operation of the facility must notify the Commission, within **twenty (20) days** of this Order, of the adverse safety impact, the basis for its determination that the requirement has an adverse safety impact, and either a proposal for achieving the same objectives specified in the Attachment 2 requirement in question, or a schedule for modifying the facility to address the adverse safety condition. If neither approach is appropriate, the Licensee must supplement its response to

Condition B.1 of this Order to identify the condition as a requirement with which it cannot comply, with attendant justifications as required in Condition B.1.

- C. 1. All Licensees shall, within **twenty (20) days** of the date of this Order, submit to the Commission, a schedule for achieving compliance with each requirement described in Attachment 2.
- 2. All Licensees shall report to the Commission when they have achieved full compliance with the requirements described in Attachment 2.
- D. Notwithstanding the provisions of 10 CFR 50.54(p) and 72.186(b), all measures implemented or actions taken in response to this Order shall be maintained until the Commission determines otherwise.

Licensees' responses to Conditions B.1, B.2, C.1, and C.2 above, shall be submitted in accordance with 10 CFR 50.4 or 72.4 as applicable. In addition, Licensees' submittals that contain Safeguards Information shall be properly marked and handled in accordance with 10 CFR 73.21.

The Director, Office of Nuclear Reactor Regulation may, by letter, relax or rescind any of the above conditions upon demonstration by the Licensee of good cause.

#### IV.

In accordance with 10 CFR 2.202, the Licensee must, and any other person adversely affected by this Order may, submit an answer to this Order, and may request a hearing on this Order, within twenty (20) days of the date of this Order. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time in which to submit an answer or request a hearing must be made in writing to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission,

Washington, DC 20555, and include a statement of good cause for the extension. The answer may consent to this Order. Unless the answer consents to this Order, the answer shall, in writing and under oath or affirmation, specifically set forth the matters of fact and law on which the Licensee or other person adversely affected relies and the reasons as to why the Order should not have been issued. Any answer or request for a hearing shall be submitted to the Secretary, Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, ATTN: Rulemakings and Adjudications Staff, Washington, DC 20555. Copies also shall be sent to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555; to the Assistant General Counsel for Materials Litigation and Enforcement at the same address; to the Regional Administrator for NRC Region I, II, III, or IV, as appropriate for the specific facility; and to the Licensee if the answer or hearing request is by a person other than the Licensee. Because of possible disruptions in delivery of mail to United States Government offices, it is requested that answers and requests for hearing be transmitted to the Secretary of the Commission either by means of facsimile transmission to 301-415-1101 or by e-mail to [hearingdocket@nrc.gov](mailto:hearingdocket@nrc.gov) and also to the Office of the General Counsel either by means of facsimile transmission to 301-415-3725 or by e-mail to [OGCMailCenter@nrc.gov](mailto:OGCMailCenter@nrc.gov). If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.714(d).<sup>1</sup>

---

<sup>1</sup>The most recent version of Title 10 of the *Code of Federal Regulations*, published January 1, 2002, inadvertently omitted the last sentence of 10 CFR 2.714 (d) and paragraphs (d)(1) and (d)(2) regarding petitions to intervene and contentions. For the complete, corrected text of 10 CFR 2.714 (d), please see 67 FR 20884; April 29, 2002.

If a hearing is requested by the Licensee or a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained.

Pursuant to 10 CFR 2.202(c)(2)(i), the Licensee may, in addition to demanding a hearing, at the time the answer is filed or sooner, move the presiding officer to set aside the immediate effectiveness of the Order on the ground that the Order, including the need for immediate effectiveness, is not based on adequate evidence but on mere suspicion, unfounded allegations, or error.

In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section III above shall be final twenty (20) days from the date of this Order without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section III shall be final when the extension expires if a hearing request has not been received. AN ANSWER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Dated this      day of

Attachments: 1. List of Addressees  
2. Compensatory Measures

## Compensatory Measures

### A. Background:

These compensatory measures (CMs) are established to delineate licensee responsibility in response to the threat environment presently in existence in the aftermath of the events of September 11, 2001. Excessive work schedules can challenge the ability of security force personnel to remain vigilant and effectively perform their duties.

### B. Scope:

Operating nuclear power reactor licensees shall comply with the following CMs to ensure, in part, that nuclear facility security force personnel are not assigned to duty while in a fatigued condition that could reduce their alertness or ability to perform functions necessary to identify and promptly respond to plant security threats. Work hour controls shall apply to personnel performing the following functions: armed member of the security force, central alarm station operator, secondary alarm station operator, security shift supervisor, and watchperson (i.e., watchman).

### C. Compensatory Measures:

#### 1. Individual Work Hour Controls

##### (a) Personnel performing the functions identified in B:

##### (1) Shall not exceed the following limits, excluding shift turnover time:

- (i) 16 hours in any 24-hour period,
- (ii) 26 hours in any 48-hour period, and
- (iii) 72 hours in any 7-day period.

(2) Shall have a minimum 10-hour break between work periods. The participation in turnover is permitted during the break period.

(3) May be authorized, by the licensee, to deviate from the limits specified in C.1(a)(1) and/or C.1(a)(2) provided:

- (i) The licensee could not have reasonably foreseen or controlled the circumstance necessitating the deviation,
- (ii) The security shift supervisor has determined that the deviation is required to maintain the security for the facility,
- (iii) An evaluation is performed, in advance, by individuals with training, as provided by the licensee, in the symptoms, contributing factors, and effects of fatigue that determined that the individual's fitness for duty would not be

adversely affected by the additional work period to be authorized under the deviation, and

(iv) The basis and approval for C.1(a)(3) items (i), (ii), and (iii) are documented.

Note 1: An 8-hour break may be authorized as deviation from the 10-hour requirement of C.1(a)(2) if the deviation is required for a scheduled transition of crews between work schedules or shifts.

(b) The number and duration of approved deviations shall be limited to the extent practicable.

(c) The licensee shall monitor and control individual work hours to ensure that excessive work hours are not compromising worker alertness and performance.

## 2. Group Work Hour Controls

Group average work hours for personnel performing the functions identified in B shall be controlled in accordance with the following limits:

(a) Normal Plant Conditions: The average number of hours actually worked by personnel performing the functions identified in B, shall not exceed 48 hours per week averaged over consecutive periods not to exceed six (6) weeks. Workers who did not work at least 75 percent of the normally scheduled hours during the averaging period shall not be included when calculating the average.

(b) Planned Plant or Planned Security System Outages:

(1) The average number of hours actually worked by personnel performing the functions identified in B, shall not exceed 60 hours per week averaged over consecutive periods not to exceed six (6) weeks. For planned abnormal plant conditions whose duration is less than the averaging period the limit would be 60 hours per week averaged over the duration of the condition. Workers who did not work at least 75 percent of the normally scheduled hours during the averaging period shall not be included when calculating the average.

Note 2: Licensee may define the beginning of a planned plant outage to be up to 3 weeks prior to the plant shutdown (i.e., plant operational mode not equal to 1).

(2) The limit defined in C.2(b)(1) can be used for up to 90 days. For periods greater than 90 days, the licensee shall take prompt action to limit hours worked in accordance with the requirements of C.2(a). The use of the limits defined in C.2(b)(1) shall not exceed 120 days.

(c) Unplanned Plant or Unplanned Security Outages or An Increase in Plant Threat Condition (i.e., increase in protective measure level as promulgated by NRC Advisory):

(1) There are no specific group limits for this condition.

(2) For periods greater than 90 days, the licensee shall take prompt action to limit hours worked in accordance with the requirements of C.2(a). The use of the allowance defined in C.2(c)(1) shall not exceed 120 days.

Note 3: For the purposes of these CMs, the baseline threat condition is defined as the least significant threat condition in effect in the last 120 days.

Note 4: If an increase in threat condition occurs while the plant is in a planned outage, the requirements of C.2(c) apply for the increased threat condition. If the threat condition returns to the baseline threat condition during the planned outage, the requirements of C.2(b) apply using the original licensee defined start date for the planned outage.

Note 5: If multiple increases in threat condition occur while the conditions of C.2(c) are in effect, the requirements of C.2(c)(2) reset with each increase.

Note 6: If the threat condition decreases, the new threat condition shall be compared to the baseline to determine if the requirements of C.2(c) apply as a result of an increased threat condition. If so, C.2(c)(2) shall be referenced to the date when the current threat condition was last entered as the result of an increase.

Note 7: Licensees shall reference changes in threat condition prior to the issuance of these CMs to determine the baseline threat condition and whether the requirements of C.2(c) apply.

3. Licensees shall be exempt from the requirements of C.1 and C.2 during declared emergencies as defined in the licensee's emergency plan.

4. Procedures

Develop or augment procedures, as necessary, for personnel within the scope of this CM to:

(a) Describe the process for implementing the controls for hours worked specified in C.1, C.2, and C.3 of this CM.

(b) Describe the process to be followed if an individual reports prior to or during a duty period that he or she considers himself or herself unfit for duty due to fatigue.

(c) Document self-declarations of unfit for duty due to fatigue if upon completion of the licensee's evaluation it is determined the individual should be returned to work without a break of at least 10 hours.

## Detailed Comments From the January 23, 2003, Public Meeting

### Industry View

- Staff review of security personnel work hours (collected late August to late October 2002) does not reflect current conditions in the industry.
- Security personnel fatigue is not as important or urgent as other issues in the security area.
- NRC staff relies too heavily on the use of Orders. Security personnel fatigue should be pursued via rulemaking.
- If the staff feels an Order is required, the industry would support extending Generic Letter 82-12 to cover security personnel.
- Narrow the scope of the compensatory measures (CMs) to address issues of urgency. Eliminate references to "Self-Declaration Procedures" and "Fatigue Mitigation Controls."
- Industry wants to link the timing of the review and comment periods for the proposed orders on fatigue and guard force training due to their compounding effect.
- Industry does not want voluntary overtime regulated.
- Industry is concerned over the impact of this Order on existing collective bargaining agreements.
- Industry requested a second meeting prior to the staff moving forward.
- Revise the 24/48 work hour limit to 26/48 work hour limit to better accommodate the 12-hour shift schedule.

### Nuclear Security Officers

- The NRC should protect the rights of individuals to earn as much voluntary overtime as they want.

### Public View

- Order should apply to all workers important to safety, not just security force personnel.
- The proposed Order/CMs have loopholes that may allow excessive overtime to continue.
- Industry should not be allowed to extend overtime beyond the work hour limits of 16/24, 24/48, and 72/7 day.
- Industry should not be allowed to use the elevated overtime limits for planned events such as outages.



## Detailed Comments From the February 21, 2003, Public Meeting

### Industry View

- Reduce the scope of security personnel covered under the Order to only armed responders and others required as part of the protective strategy. Exclude watchpersons because there is no urgent need for their inclusion. Consider watchpersons as a part of the fatigue rulemaking effort.
- A 10-hour break rather than an 8-hour break between work periods would have an impact on 8-hour shift schedules. For example, switching from one shift to another could result in a deviation for the 8-hour shift schedule. The 10-hour break could impact licensees on 12-hour shifts if they hold people over for more than 2 hours.
- Clarify the level of training required by the individual who would complete the fatigue evaluation as the basis for a deviation.
- The calculation of shift average work hours for actual hours worked is an improvement over a scheduling limit; however, the method to calculate such hours needs to be simplified. The inclusion of considerations regarding sick leave, absences and vacations are examples that result in a burdensome calculation. The average number of actual hours worked (1) should be a "snapshot" (e.g., for each calendar month) rather than over a rolling consecutive period and (2) should be based on the entire security force rather than the shift.
- Change the sub-heading "Planned Plant Outages" to "Planned Plant or Planned Security System Outages."
- Clarification of the phrase "increase in threat condition" is needed.
- Allow licensees to exceed the shift limits during unplanned plant outages and threat conditions for up to 210 days rather than 120 days. This increase would allow licensees more time to hire new security force personnel.
- Allow greater flexibility in the Order during emergency conditions (e.g., war). Verify such conditions could be addressed via a letter to the NRC rather than Part 50.90 requirements.
- The NRC should have greater sensitivity to situations that are beyond the licensee's control.
- Clarify that the clock is reset for the 120-day period when shifting from one threat level to a higher threat level.
- Delete the language describing self-declaration procedures that states: consistent with the requirements of 10 CFR Part 26, "Fitness-For-Duty Programs," and 10 CFR 50.7, "Employee Protection."
- Only require documentation on self-declarations of unfit for duty due to fatigue if the licensee disagrees with the individual's self-declaration and returns the individual to work.

- Provide additional guidance if an individual provides a self-declaration including whether a drug and alcohol test would be required and whether the evaluation must be performed by a psychologist or psychiatrist.
- Delete the following procedural requirement: “Address other factors that could affect fatigue such as mental stress, illness, and the use of prescription and over-the-counter medications.”
- Licensees have some reluctance to hire new security force personnel as a result of uncertainties such as the design basis threat (DBT) and the unknown length of threat levels.
- Extend the implementation period of the Order from 60 days to perhaps 6 months to 9 months.
- The NRC should consider an integrated approach in its expectations regarding licensee implementation of the DBT, training and fatigue orders.
- Explain “could not have reasonably foreseen or controlled the circumstance” necessitating the deviation.

#### Nuclear Security Officers

- Limits on the ability of licensees to require overtime is needed to protect nuclear security officers at some facilities.
- Licensee would not need to rely on overtime or need deviations to cover sick leaves, late arrivals, and vacations if they would staff their shifts adequately. Shifts have been cut back to the bare bone.

#### Public View

- Change the language on individual limits to read the licensee shall “demonstrate” rather than “monitor” readiness.
- Further, it was noted that the individual limits are much greater than the Department of Energy’s 1994 draft guidelines: no more than 12 hours per work day, including shift turnover, and no more than 60 total hours per work week.
- Include limits on work hours during threat conditions. Public was concerned that the security officers would be tired when needed the most.
- Indicated that the 16/24 work hour limit and 72/7 day limit were too long for any condition.

**Comparison Between Order  
in COMSECY-02-0066 and Proposed Revised Order**

Topic	Draft Order in COM-SECY-02-0066	Proposed Revised Order
Individual Limit C.1(a)(1)(ii)- 26 hours in any 48-hour period	24 hours in any 48-hour period	26 hours in any 48-hour period
Individual Limit C.1(a)(2) - minimum break between work periods	8 hours	10 hours
Shift work hour controls C.2(a) - normal plant conditions	nominal 48-hour work week scheduled for shifts	average 48-hour work week for security force averaged over periods not to exceed 6 weeks—plus controls and monitoring of hours worked by an individual
Shift work hour controls C.2(b)(1) - planned outages	only individual work hour limits apply	average 60-hour work week for security force personnel
Shift work hour controls C.2(b)(2) & C.2(c)(2) - Duration of operations with elevated overtime (outages and increase in threat conditions)	take prompt action after 120 days	take prompt action to return to normal limits after 90 days  conditions above normal limits not to exceed 120 days
Procedures C.4 - Self declarations of unfit due to fatigue	describe process in procedure	describe process in procedure and document if disagree with self-declaration and individual is returned to work without a break of at least 10-hours

Topic	Draft Order in COM-SECY-02-0066	Proposed Revised Order
-------	------------------------------------	------------------------

Fatigue mitigation training requirement	ensure security force supervisors and personnel understand: (1) effects of fatigue (2) responsibility for obtaining rest (3) detection of impaired by fatigue (4) practical measures concerning decreased alertness	N/A
Notes	N/A	provided clarifications and enhancements