

January 30, 2004

MEMORANDUM TO: Glenn M. Tracy, Director
Division of Nuclear Security
Office of Nuclear Security
and Incident Response

FROM: Garmon West, Acting Chief **/RA/**
Licensee Personnel Security Section
Division of Nuclear Security
Office of Nuclear Security
and Incident Response

SUBJECT: NOTICE CONCERNING PUBLIC MEETING TO DISCUSS A DRAFT
ORDER REGARDING WORKER FATIGUE AT THE CATEGORY I FUEL
CYCLE FACILITIES (ADAMS ACCESSION NO. ML040130484)

DATE AND TIME: Friday, February 13, 2004
8:30 A.M. - 12:00 P.M.

LOCATION: U.S. Nuclear Regulatory Commission
Two White Flint North
11555 Rockville Pike, Room T8-A1
Rockville, Maryland

PURPOSE: To obtain stakeholder feedback regarding requirements and
implementation of proposed Orders concerning worker fatigue at the
Category I fuel cycle facilities. Attached are the following: (1) meeting
agenda, (2) proposed draft Order and revised compensatory measures
for BWX Technologies (BWXT) based upon the first meeting, and (3)
proposed draft Order and revised compensatory measures for Nuclear
Fuel Services (NFS) based upon the first meeting.

CATEGORY 2: This is a Category 2 meeting. The public is invited to participate in this
meeting by discussing regulatory issues with the NRC at designated
points during the meeting. Feedback forms will be made available.
Meeting summary with the list of participants will be placed on a web
page if one is established.

PARTICIPANTS: NRC
R. Zimmerman
G. Tracy
J. Shea
D. Desaulniers
G. West

STAKEHOLDERS
J. Noel (BWXT)
M. Warren (NFS)
et al.

Attachments: As Stated (ADAMS Accession No: ML040130484).

cc w/att: See next page

CONTACT: Alex Sapountzis
301-415-7822, APS@NRC.GOV

DISTRIBUTION FOR MEETING NOTICE WITH STAKEHOLDERS ON FEBRUARY 13, 2004

DATED: January 30, 2004

DISTRIBUTION:

Hard copy:

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Receptionist (OWFN/TWFN)

E-mail

PUBLIC

DNS r/f

G. Tracy

R. Zimmerman

J. Goldberg

K. Ramsey

B. Gleaves

P. Silva

M. Lamastra

J. Lubinski

D. Stout

J. White

G. Kuzo

A. Boland

J. Creed

H. Nieh

J. Shea

D. Desaulniers

T. Pruett

PMNS

J. Heck

D. Cummings

J. Persensky

R. Virgilio

V. Dricks

E. Johannemann

A. Frazier

A. Rayland

RidsNrrDssaSpsb

RidsNrrPMKJabbour

RidsOpaMail

RidsAcrsAcnwMailCenter

RidsOgcMailCenter

David Lochbaum, dlochbaum@ucsusa.org

Danielle Brian, info@pogo.org

Jenny Weil, jenny_weil@platts.com

Edward Lyman, elyman@ucsusa.org

PMNS (PUBLIC MEETING ANNOUNCEMENT COORDINATOR)

AGENDA

MEETING WITH STAKEHOLDERS TO DISCUSS A DRAFT ORDER

CONCERNING WORKER FATIGUE AT THE CATEGORY I FUEL CYCLE FACILITIES

FEBRUARY 13, 2004

- 8:30 A.M.-9:00 A.M. REGISTRATION TWO WHITE FLINT NORTH (ROOM T8-A1)
(ADAMS ACCESSION NUMBER ML040130484)
- 9:00 A.M.-9:15 A.M. INTRODUCTIONS AND OPENING REMARKS
- Purpose, need and objectives for the meeting.
 - Format and procedures for participation in the meeting.
- 9:15 A.M.-9:30 A.M. BACKGROUND
- Current regulatory framework concerning worker fatigue.
 - Summation of first meeting.
 - Comments and questions. (Stakeholders)
- 9:30 A.M.-10:30 A.M. PRESENTATION OF DRAFT ORDER, COMPENSATORY MEASURES FOR FATIGUE WITH REVISIONS
- Background/scope (Sections A and B) of personnel covered by the draft fatigue Order.
 - Individual work-hour controls covered by the draft fatigue Order (Section C.1).
 - Comments and questions. (Stakeholders)
- 10:30 A.M.-10:45 A.M. BREAK
- 10:45 A.M.-11:30 A.M. CONTINUATION...PRESENTATION OF DRAFT ORDER, COMPENSATORY MEASURES FOR FATIGUE WITH REVISIONS
- Group work-hour controls covered by the draft fatigue Order (Section C.2).
 - Licensee exemptions during declared emergencies covered by the draft fatigue Order (Section C.3).
 - Procedures covered by the draft fatigue Order (Section C.4).
 - Comments and questions. (Stakeholders)
- 11:30 P.M.-12:00 P.M. CLOSING REMARKS BY NRC
- Summation of major topics.
 - Next steps.
 - Comments and questions. (Stakeholders)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

BWX TECHNOLOGIES, INC.
LYNCHBURG, VA

)
) Docket No. 70-27
) License No. SNM-42
) EA-03-XXX

**ORDER MODIFYING LICENSES
(EFFECTIVE IMMEDIATELY)**

I.

BWX Technologies, Inc. (BWXT) is the holder of Special Nuclear Material License SNM-42 issued by the U.S. Nuclear Regulatory Commission (NRC or Commission) authorizing the operation of Category I Fuel Cycle facilities in accordance with the Atomic Energy Act of 1954 and Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70. BWXT is required to comply with physical security in accordance with 10 CFR Part 73.

II.

On September 11, 2001, terrorists simultaneously attacked targets in New York, NY, and Washington, DC, 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 facility. On August 21, 2002, the Commission issued Orders to BWXT 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 review. The Commission has also communicated with other Federal, State, local government agencies, and industry representatives to discuss and evaluate the current threat environment in order to assess the

adequacy of security measures at licensed facilities. In addition, the Commission has been conducting a comprehensive review of its safeguards and security programs and requirements.

Work hour demands on 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 BWXT as prudent measures to address issues that may arise from work-hour related fatigue of security force personnel. Therefore, the Commission is imposing requirements, as set forth in Attachment 1 of this Order, on BWXT. 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. These requirements will remain in effect until the Commission determines otherwise.

In order to provide assurance that BWXT is implementing prudent measures to achieve a consistent level of protection, Special Nuclear Materials License SNM-42 shall be modified to include the requirements in Attachment 1 to this Order. In addition, pursuant to 10 CFR 2.202 and 70.81, 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 53, 63, 81, 104, 161b, 161i, 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 70 and 73, IT IS HEREBY ORDERED, **EFFECTIVE IMMEDIATELY**, THAT

SPECIAL NUCLEAR MATERIALS LICENSE SNM-42 IS MODIFIED AS FOLLOWS:

- A. BWXT shall, notwithstanding the provisions of any Commission regulation or license to the contrary, comply with the requirements described in Attachment 1 to this Order except to the extent that a more stringent requirement is set forth in the licensees' security plans. BWXT shall immediately start implementation of the requirements in Attachment 1 to the Order and shall complete implementation **no later than [insert date 180 days from the date of issuance]**.
- B. 1. BWXT 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 1, (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 BWXT to be in violation of the provisions of any Commission regulation or the facility license. The notification shall provide BWXT justification for seeking relief from or variation of any specific requirement.
2. If BWXT considers that implementation of any of the requirements described in Attachment 1 to this Order would adversely impact safe operation of the facility, BWXT 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 1 requirement in question, or a schedule for modifying the facility to address the adverse safety condition. If neither approach is appropriate, the BWXT 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. BWXT 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 1.
2. BWXT shall report to the Commission when they have achieved full compliance with the requirements described in Attachment 1.
- D. Notwithstanding the provisions of 10 CFR 70.32(g), all measures implemented or actions taken in response to this Order shall be maintained until the Commission determines otherwise.

BWXT's responses to Conditions B.1, B.2, C.1, and C.2, above, shall be submitted in accordance with 10 CFR 70.5. In addition, BWXT's submittals that contain Safeguards Information shall be properly marked and handled in accordance with 10 CFR 73.21.

The Director, Office of Nuclear Material Safety & Safeguards, may, by letter, relax or rescind any of the above conditions upon demonstration by the BWXT of good cause.

IV.

In accordance with 10 CFR 2.202 and 70.81, BWXT 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 Material Safety & Safeguards, 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 BWXT 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 Material Safety & Safeguards, 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, NRC Region II; and to the BWXT if the answer or hearing request is by a person other than BWXT. Because of possible disruptions in delivery of mail to United States Government offices, it is requested that answers and requests for a 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 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. If a person other than BWXT requests a hearing, that person shall set forth with particularity the manner in which the individual's interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.714(d).

If a hearing is requested by BWXT 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), BWXT 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

Martin J. Virgilio, Director
Office of Nuclear Material Safety & Safeguards

Dated this day of

Attachments: 1. 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:

BWXT shall comply with the following CMs to ensure, in part, that 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 security threats. Work hour controls shall apply to personnel performing the following functions: alarm station operator, armed member of the security force, guard, tactical response team member, watchperson (i.e., watchman), and any member of the uniformed security force that is responsible for executing the licensee's contingency plan.

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.

(4) Shall be limited to 700 hours quarterly and 2600 hours annually of actual hours worked or shall be subject to the Group Work Hour Controls of C.2.

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

(c) The licensee shall monitor and control individual work hours to ensure that excessive work hours are not compromising personnel 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 or shall be limited in accordance with the Individual Work Hour Controls of C.1(a)(4):

(a) Normal Conditions: The average number of hours actually worked by personnel performing the functions identified in B shall not exceed 48 hours per week, excluding shift turnover time, averaged over consecutive periods not to exceed six (6) weeks. Personnel 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. If the group average limit is exceeded, the licensee shall take prompt action to reduce the average hours worked in accordance with the compensatory measures and take actions to prevent recurrence.

(b) 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, excluding shift turnover time, averaged over consecutive periods not to exceed six (6) weeks. For planned abnormal security conditions whose duration is less than the averaging period, the limit would be 60 hours per week averaged over the duration of the condition. Personnel 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. If the group average limit is exceeded, the licensee shall take prompt action to reduce the average hours worked in accordance with this compensatory measures and take actions to prevent recurrence.

(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 Security Outage or An Increase in Threat Condition (i.e., increase in protective measures 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 2: 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 3: If an increase in threat condition occurs while the facility is in a planned security 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 facility outage.

Note 4: 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 5: 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 6: The 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.

(d) Pilot and Annual Force-on-Force (FOF) Exercises: The average number of hours actually worked by personnel performing the functions identified in B, shall not exceed 60 hours per week, excluding shift turnover time, during the period of the actual conduct of the FOF exercises (i.e., licensee annual exercises and NRC observed FOF exercises).

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. The procedure shall specify whether the work hours shall be limited in accordance with the Individual Work Hour Controls of C.1(a)(4) or the Group Work Hour Controls of C.2.

(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.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

NUCLEAR FUEL SERVICES, INC.
ERWIN, TN

)
) Docket No. 70-143
) License No. SNM-124
) EA-03-XXX

**ORDER MODIFYING LICENSES
(EFFECTIVE IMMEDIATELY)**

I.

Nuclear Fuel Services, Inc. (NFS) is the holder of Special Nuclear Material License SNM-124 issued by the U.S. Nuclear Regulatory Commission (NRC or Commission) authorizing the operation of Category I Fuel Cycle facilities in accordance with the Atomic Energy Act of 1954 and Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70. NFS is required to comply with physical security in accordance with 10 CFR Part 73.

II.

On September 11, 2001, terrorists simultaneously attacked targets in New York, NY, and Washington, DC, 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 facility. On August 21, 2002, the Commission issued Orders to NFS 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 review. The Commission has also communicated with other Federal, State, local government agencies, and industry representatives to discuss and evaluate the current threat environment in order to assess the

adequacy of security measures at licensed facilities. In addition, the Commission has been conducting a comprehensive review of its safeguards and security programs and requirements.

Work hour demands on 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 NFS as prudent measures to address issues that may arise from work-hour related fatigue of security force personnel. Therefore, the Commission is imposing requirements, as set forth in Attachment 1 of this Order, on NFS. 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. These requirements will remain in effect until the Commission determines otherwise.

In order to provide assurance that NFS is implementing prudent measures to achieve a consistent level of protection, Special Nuclear Materials License SNM-124 shall be modified to include the requirements in Attachment 1 to this Order. In addition, pursuant to 10 CFR 2.202 and 70.81, 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 53, 63, 81, 104, 161b, 161i, 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 70 and 73, IT IS HEREBY ORDERED, **EFFECTIVE IMMEDIATELY**, THAT SPECIAL NUCLEAR MATERIALS LICENSE SNM-124 IS MODIFIED AS FOLLOWS:

- A. NFS shall, notwithstanding the provisions of any Commission regulation or license to the contrary, comply with the requirements described in Attachment 1 to this Order except

to the extent that a more stringent requirement is set forth in the licensees' security plans. NFS shall immediately start implementation of the requirements in Attachment 1 to the Order and shall complete implementation **no later than [insert date 180 days from the date of issuance]**.

- B. 1. NFS 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 1, (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 NFS to be in violation of the provisions of any Commission regulation or the facility license. The notification shall provide NFS justification for seeking relief from or variation of any specific requirement.
2. If NFS considers that implementation of any of the requirements described in Attachment 1 to this Order would adversely impact safe operation of the facility, NFS 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 1 requirement in question, or a schedule for modifying the facility to address the adverse safety condition. If neither approach is appropriate, the NFS 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. NFS 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 1.

2. NFS shall report to the Commission when they have achieved full compliance with the requirements described in Attachment 1.

D. Notwithstanding the provisions of 10 CFR 70.32(g), all measures implemented or actions taken in response to this Order shall be maintained until the Commission determines otherwise.

NFS's responses to Conditions B.1, B.2, C.1, and C.2, above, shall be submitted in accordance with 10 CFR 70.5. In addition, NFS's submittals that contain Safeguards Information shall be properly marked and handled in accordance with 10 CFR 73.21.

The Director, Office of Nuclear Material Safety & Safeguards, may, by letter, relax or rescind any of the above conditions upon demonstration by the NFS of good cause.

IV.

In accordance with 10 CFR 2.202, NFS 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 Material Safety & Safeguards, 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 NFS 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 Material Safety & Safeguards, 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, NRC Region II; and to the NFS if the answer or hearing request is by a person other than NFS. Because of possible disruptions in delivery of mail to United States Government offices, it is requested that answers and requests for a 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 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. If a person other than NFS requests a hearing, that person shall set forth with particularity the manner in which the individual's interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.714(d).

If a hearing is requested by NFS 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), NFS 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

Martin J. Virgilio, Director
Office of Nuclear Material Safety & Safeguards

Dated this day of

Attachments: 1. 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:

NFS shall comply with the following CMs to ensure, in part, that 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 security threats. Work hour controls shall apply to personnel performing the following functions: alarm station operator, armed member of the security force, guard, tactical response team member, watchperson (i.e., watchman), and any member of the uniformed security force that is responsible for executing the licensee's contingency plan.

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.

(4) Shall be limited to 700 hours quarterly and 2600 hours annually of actual hours worked or shall be subject to the Group Work Hour Controls of C.2.

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

(c) The licensee shall monitor and control individual work hours to ensure that excessive work hours are not compromising personnel 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 or shall be limited in accordance with the Individual Work Hour Controls of C.1(a)(4):

(a) Normal Conditions: The average number of hours actually worked by personnel performing the functions identified in B shall not exceed 48 hours, excluding shift turnover time, per week averaged over consecutive periods not to exceed six (6) weeks. Personnel 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. If the group average limit is exceeded, the licensee shall take prompt action to reduce the average hours worked in accordance with the compensatory measures and take actions to prevent recurrence.

(b) 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, excluding shift turnover time, averaged over consecutive periods not to exceed six (6) weeks. For planned abnormal security conditions whose duration is less than the averaging period, the limit would be 60 hours per week averaged over the duration of the condition. Personnel 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. If the group average limit is exceeded, the licensee shall take prompt action to reduce the average hours worked in accordance with this compensatory measures and take actions to prevent recurrence.

(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 Security Outage or An Increase in Threat Condition (i.e., increase in protective measures 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 2: 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 3: If an increase in threat condition occurs while the facility is in a planned security 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 facility outage.

Note 4: 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 5: 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 6: The 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.

(d) Pilot and Annual Force-on-Force (FOF) Exercises: The average number of hours actually worked by personnel performing the functions identified in B, shall not exceed 60 hours per week, excluding shift turnover time, during the period of the actual conduct of the FOF exercises (i.e., licensee annual exercises and NRC observed FOF exercises).

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. The procedure shall specify whether the work hours shall be limited in accordance with the Individual Work Hour Controls of C.1(a)(4) or the Group Work Hour Controls of C.2.

(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.