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## Security Working Hours And Fatigue

Effective Date: \_\_\_\_\_

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A-1

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## 1.0 PURPOSE

The objective of NOP-LP-1005, Security Working Hours and Fatigue, in accordance with NRC Order EA-03-038, is to provide reasonable assurance that security personnel perform their duties in a safe, reliable and trustworthy manner by not working excessive hours that could create fatigue resulting in physical or mental impairment, thereby, hindering competent performance. Additional objectives include:

- 1.1 Establishment of measures for the detection of individuals who are fatigued (observed or self declared) by providing guidance to Security supervisory personnel concerning fatigue assessment and follow-up measures.
- 1.2 To provide the established guidance necessary to control excessive working hours.

## 2.0 SCOPE

### 2.1 Applicability

- 2.1.1 This procedure applies to the FENOC Nuclear Plants: Beaver Valley Power Station (BVPS); Davis-Besse Nuclear Power Station (DBNPS) and Perry Nuclear Power Plant (PNPP).
- 2.1.2 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, Watchperson (i.e., Watchman) and officers in training.

## 3.0 DEFINITIONS

- 3.1 Aberrant Behavior – Any significant change in the individual's normal or usual functioning behavior in terms of work-related activities and interaction with other individuals in the work place. Aberrant behavior may be caused by stress, fatigue, other psychological problems or the use of drugs or alcohol.
- 3.2 Baseline Threat Condition – The least significant threat condition in effect in the last 120 days.

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3.3 Fatigue – Weariness resulting from hard work or strain. To be or become exhausted or tired. Physical or mental weariness.

3.4 Fitness For Duty (FFD) – The reasonable assurance that an individual performs duties in a safe, reliable and trustworthy manner.

#### 4.0 PROCEDURE DETAILS

##### 4.1 Specific Requirements

The designated automated tracking system shall be used to track hours worked by security force personnel to ensure compliance with work control hours as specified in NRC Order EA03-038. In the event that the automated system becomes unavailable, a manual system may be used. Upon return to availability of the automated system, the manually tracked data will be entered into the automated system. Supervisory oversight along with individual officer responsibility shall ensure compliance with individual work control hours as defined in 4.3.1.a, b, and c.

##### 4.2 Security Working Hour Guidelines

4.2.1 The objective of the controls over the use of working hours is to assure that to the extent practicable, Security Force Personnel are not assigned to duty while in a fatigued condition that could significantly reduce their mental alertness or ability to perform functions necessary to identify and promptly respond to plant security threats.

##### 4.3 Individual Work Control Hours For Security Force Personnel

4.3.1 Security Personnel performing the functions identified in section 2.1.2, excluding shift turnover time, shall not exceed the following:

- a. 16 hours in any 24 hour period,
- b. 26 hours in any 48 hour period, and
- c. 72 hours in any 7 day period.

**NOTE:** An 8 hour break may be authorized as deviation from the 10 hour requirement of 4.3.2 if the deviation is required for a scheduled transition of crews between work schedules or shifts.

4.3.2 Security Force Personnel shall have a minimum 10 hour break between work periods. Participation in turnover is permitted during the break period.

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4.3.3 Conditions that may cause a deviation of the above limits as stated in 4.3.1.a, b, c and/or 4.3.2:

- a. The licensee could not have reasonably foreseen or controlled the circumstance necessitating the deviation;
- b. The Security Shift Supervisor has determined that the deviation is required to maintain the security for the facility;
- c. An evaluation is performed, in advance, by Security Supervision who have been trained by the licensee in the symptoms, contributing factors, and effects of fatigue that determined the individual's fitness for duty would not be adversely affected by the additional work period to be authorized under the deviation and;
- d. The basis and approval for 4.3.3.a, b, c. are documented on a work hours deviation form.

4.3.4 Deviations from the work hour guidelines are normally requested by the immediate supervisor and authorized by the Plant Manager or his designees (or by higher levels of management) using the Request for Overtime Deviation Authorization (BVPS), The Overtime Deviation Request at DBNPS (DB-0047), or the Technical Specification Working Hour Deviation Request (PNPP NO. 7699) at the Perry plant. Working hour deviation requests should not be completed significantly in advance of the hours to be worked.

4.3.5 The Security Shift Supervisor requesting working hour deviation must be familiar with the condition of the individual involved to ensure that the additional working hours can be safely worked.

4.3.6 The number and duration of approved deviations shall be reviewed monthly by the Security Manager and limited to the extent possible.

4.3.7 The Security Shift Supervisor shall monitor and control individual work hours to ensure that excessive work hours are not compromising worker alertness and performance. If an individual's work hours are exceeded, the license shall take prompt action to reduce the hours worked and prevent recurrence through the Corrective Action Program.

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#### 4.4 Group Work Control Hours For Security Force Personnel.

##### 4.4.1 Group average work hours for security force personnel performing the functions identified in 2.1.2 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 2.1.2 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. If the group average limit is exceeded, the licensee shall take prompt action to reduce the average hours worked and take actions to prevent recurrence through the Corrective Action Program.

NOTE: 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 Mode 1).

- b. Planned Plant or Planned Security System Outages: The average number of hours actually worked by personnel performing the functions identified in 2.1.2 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. If the group average limit is exceeded, the licensee shall take prompt action to reduce the average hours worked and take actions to prevent recurrence through the Corrective Action Program.
  1. The limit defined in 4.4.1. b may 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 4.4.1 a. The use of the limits defined in 4.4.1 .b 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): There are no specific group limits for this condition.

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1. ~~For periods greater than 90 days, the licensee shall take prompt action to limit hours worked in accordance with the requirements of~~  
~~4.4.1. a. The use of the allowance defined in 4.4.1. c shall not~~  
exceed 120 days.

#### 4.5 Declared Emergencies

- 4.5.1 Licensees shall be exempt from the requirements of 4.3 and 4.4 during declared emergencies as defined in the licensee's emergency plan.

#### 4.6 Threat Conditions

- 4.6.1 The baseline threat condition is defined as the least significant threat condition in effect in the last 120 days.
- 4.6.2 If an increase in threat condition occurs while the plant is in a planned outage, the requirements of 4.4.1.c apply for the increased threat condition. If the threat condition returns to the baseline threat condition during the planned outage, the requirements of 4.4.1.b apply using the original licensee defined start date for the planned outage.
- 4.6.3 If multiple increases in threat condition occur while the conditions of 4.4.1.c are in effect, the requirements of 4.4.1.c.1 reset with each increase.
- 4.6.4 If the threat condition decreases, the new threat condition shall be compared to the baseline to determine if the requirements of 4.4.1.c apply as a result of an increased threat condition. If so, 4.4.1.c.1 shall be referenced to the date when the current threat condition was last entered as the result of an increase.
- 4.6.5 Licensees shall reference changes in threat condition prior to implementing 4.4.1.c of this procedure to determine the baseline threat condition and whether the requirements of 4.4.1.c apply.

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#### 4.7 Fatigue

4.7.1 As described in Section 4.2.1, the objective of the controls over the use of working hours is to assure that to the extent practicable, personnel are not assigned to work activities while in a fatigued condition that could significantly reduce their mental alertness or their decision making capability and create an FFD concern. Supervisory responsibilities include recognizing declining work performance caused by fatigue in its early stages and to respond promptly and constructively. The primary concern is to preclude actions that could be detrimental to the individual, other workers, or plant safety. All Fitness For Duty (FFD) related issues shall be addressed in accordance with FENOC procedure NOP-LP-1002, Fitness For Duty Program.

4.7.2 The following are general indicators of degraded behavior resulting from fatigue that must be watched for:

- a. Sleepiness-yawning, tired eyes, frequent yawning, shaking hands, difficulty keeping eyes open.
- b. Decreased energy level.
- c. Feeling of malaise or lack of motivation, verbalizes or shows no desire and/or lack of interest in activity.
- d. Restlessness/fidgeting.
- e. Lethargic, listless or disinterested in surroundings
- f. Poor pallor (color), bluish/gray around mouth and lips.
- g. Shortness of breath/dizziness/pains/signs of extreme stress with exertion, decreased concentration.
- h. Increased irritability, anxiety, impatience.

4.7.3 Security Supervisors observing an individual experiencing symptoms of fatigue or having an officer reporting to or during shift that they are unfit for duty due to fatigue shall:

- a. Relieve the officer of duty.
- b. Report the observation to the Licensee Security Representative (if applicable).



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- c. Document the observation on the Security Supervisor Guide for Fatigue (Form NOP-LP-1005-01) and appropriate Security incident report.

4.7.4 If the conditions identified in section 4.7.2 are not due to fatigue, they may be indicative of other FFD issues (drug, alcohol, physical illness and/or psychological problems).

## 5.0 RECORDS

### 5.1 Records Handling

Records completed/generated by this procedure shall be handled in accordance with each plant's established records management program.

### 5.2 Records Capture

The following records are generated by this document:

#### 5.2.1 Quality Records

1. Request for Overtime Deviation Authorization at Beaver Valley
2. Technical Specification Working Hour Deviation Request at Perry PNPP No. 7699
3. Overtime Deviation Request at Davis-Besse DB-0047

#### 5.2.2 Non-Quality Records

1. Security Supervisor Guide for Fatigue (Form NOP-LP-1005-01)