

# NRC INSPECTION MANUAL

IRIB

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## TEMPORARY INSTRUCTION 2515/180

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### INSPECTION OF PROCEDURES AND PROCESSES FOR MANAGING FATIGUE

#### 2515/180-01 OBJECTIVE

The objective of this TI is to support the review of licensees' implementation procedures and processes required by 10 CFR 26, Subpart I, "Managing Fatigue." The review will determine whether the necessary procedures and processes are in place to reasonably ensure the requirements specified in Subpart I are being addressed. This review will use, in part, guidance provided to the industry in NEI 06-11, Revision 1, "Managing Personnel Fatigue at Nuclear Power Reactor Sites" and Regulatory Guide 5.73, "Fatigue Management for Nuclear Power Plant Personnel."

#### 2515/180-02 APPLICABILITY

This TI is applicable to all holders of operating licenses for nuclear power reactors, except nuclear power reactors that have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel. This TI is planned to be performed at one site per utility (e.g., one Exelon site, one Progress Energy site, etc.) but may be performed at any site with NRR concurrence. This TI will not specifically inspect the security area but many of the processes will account for security personnel as well as all other covered and non-covered workers.

#### 2515/180-03 BACKGROUND

The Final Rule for 10 CFR Part 26, Fitness for Duty Programs, was published March 31, 2008 (73 FR 17176) and went into effect April 30, 2008. Licensees and other entities were allowed to delay implementation of Subpart I until October 1, 2009.

The Nuclear Energy Institute (NEI) published NEI 06-11, Revision 1, in October 2008 to provide guidance to licensees on an approach to meeting Subpart I requirements. The goal was to provide management processes, record keeping processes and monitoring tools that ensure compliance while providing guidance for flexibility for day-to-day operations.

The NRC issued Regulatory Guide 5.73 in March 2009 which endorsed NEI 06-11, Rev. 1, with certain clarifications, additions, and exceptions.

This TI provides inspection requirements and guidance for the review of licensee processes and procedures for implementing the requirements of Subpart I by determining whether:

- a. the licensee has established a policy for the management of fatigue for all individuals who are subject to 10 CFR Part 26, Fitness for Duty (FFD) program;
- b. the licensee has procedures in place that implement various aspects of the rule, such as rights and responsibilities related to self-declaration, the process to be followed when conducting fatigue assessments, etc.;
- c. the FFD training program has been updated to include the new knowledge and abilities (KAs) required by the rule;
- d. the licensee has a process in place to retain all required documentation for the specified time period;
- e. the licensee has a process in place to ensure all reporting requirements contain the appropriate information and are scheduled as specified by the rule; and
- f. the licensee has a process in place to perform an audit of the management of worker fatigue.

Licensees should be able to demonstrate that procedures and processes are in place to reasonably assure proper implementation of Subpart I. This assurance is based on the ability to address each requirement in Subpart I and not on evidence that the licensee actually meets the requirement.

## 2515/180-04 INSPECTION REQUIREMENTS

### 04.01 General Provisions.

Determine whether a policy and procedures are in place which address the following requirements specified in § 26.203 of Subpart I:

- a. Confirm that the licensees' FFD program policy contains information regarding the management of fatigue for individuals who are subject to Subpart I.
- b. Confirm that the licensee has procedures in place that describe:
  1. the process to be followed when any individual identified in § 26.4(a) through (c) makes a self-declaration that he or she is not fit to safely and competently perform his or her duties for any part of a working tour as a result of fatigue;

2. the process for implementing the work hour controls required by § 26.205 for the individuals who are performing the duties listed in § 26.4(a);
  3. the process to be followed in conducting fatigue assessments under § 26.211; and
  4. the disciplinary actions that the licensee may impose on an individual following a fatigue assessment, and the conditions and considerations for taking those disciplinary actions.
- c. Confirm that the licensees' training program has added the additional KAs as specified in § 26.203(c)(1) and (c)(2) and are subject to being tested on the comprehensive exam.
- d. Confirm that the licensee has a process in place to retain the following records for at least 3 years or until the completion of all related legal proceedings, whichever is later:
1. records of work hours for individuals who are subject to the work hour controls in § 26.205;
  2. records of shift schedules and shift cycles of individuals who are subject to the work hour controls in § 26.205;
  3. the documentation of waivers that is required in § 26.207(a)(4), including the bases for granting the waivers;
  4. the documentation of work hour reviews that is required in § 26.205(e)(3) and (e)(4); and
  5. the documentation of fatigue assessments that is required in § 26.211(g).
- e. Confirm that the licensees' process for developing the annual FFD report has provisions for documenting the summary of instances where work hour controls were waived.

#### 04.02 Work hours.

Determine whether the licensee has a review process in place for the work hour controls specified in § 26.205 of Subpart I:

Confirm that the licensee has a process in place to conduct an effectiveness review of their control of work hours of individuals subject to this part at least once per calendar year.

#### 04.03 Waivers and exceptions.

Determine whether the licensee has a process in place to manage the use of waivers specified in § 26.207 of Subpart I:

- a. Confirm that the licensees' process provides guidance for documenting the basis for the waiver, results of the assessment and the approval to perform work.
- b. Confirm that the licensees' process accounts for the exceptions to the waiver process.

#### 04.04 Self-declarations.

Determine whether the licensee has a process which describes the actions to take when a covered individual makes a self-declaration that he or she is unable to safely and competently perform his or her duties as specified in § 26.209 of Subpart I.

#### 04.05 Fatigue assessments.

Determine whether the licensee has a process in place for conducting fatigue assessments as specified in § 26.211 of Subpart I.

- a. Confirm that the licensees' process provides guidance for conducting fatigue assessments under the following conditions:
  1. For cause;
  2. Self-declaration;
  3. Post-event; and
  4. Followup.
- b. Confirm that the licensees' process for conducting fatigue assessments have provisions for preparing an annual summary.

### 2515/180-05 REPORTING REQUIREMENTS

#### 05.01 Inspection Guidance

The results of this Temporary Instruction should be included in Section 4OA5 of an integrated inspection report and should be forwarded to NRR/DIRS/IRIB, Attention: Ross Telson via e-mail at [Ross.Telson@nrc.gov](mailto:Ross.Telson@nrc.gov). Mr. Telson can also be reached by telephone at (301) 415-2256. If findings are specifically attributed to security performance, these results should also be shared with Paul Harris, NSIR/DSO/ISCPB, at (301) 415-1169.

Inspectors should briefly describe the areas reviewed (i.e., provide a summary documenting that the inspection was completed) and any findings in Section 40A5, "Other," of the resident inspector's quarterly integrated inspection report. The following is suggested wording for the inspection report:

### Inspection Scope

The objective of this TI was to determine if licensees' implementation procedures and processes required by 10 CFR 26, Subpart I, "Managing Fatigue" are in place to reasonably ensure the requirements specified in Subpart I are being addressed. The TI applies to all operating nuclear power reactor licensees but is intended to be performed for one site per utility. The inspector interfaced with the appropriate station staff to obtain and review station policies, procedures and processes necessary to complete all portions of this TI.

### Findings and Observations

No findings of significance or observations were identified.

Any findings identified during this inspection will be processed and documented in accordance with NRC Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports." Additionally, these findings will be processed through a panel to ensure issues are evaluated in a consistent manner. Significance of inspection findings should be evaluated in accordance with applicable appendices of IMC 0609, "Significance Determination Process." Any noncompliance resulting from this inspection will be evaluated and documented in accordance with the NRC Enforcement Policy (NUREG-1600) and the NRC Enforcement Manual.

Observations may be documented in Section 40A5 at the discretion of the inspector in accordance with IMC 0612 requirements. The intent of documenting these observations is for the program office to evaluate the Program issues for improvements in the inspection program guidance. An example of an observation that may warrant documentation is if the licensee's process allows for exceptions to the rule beyond what is allowed by 10 CFR 26.207.

2515/180-06          COMPLETION SCHEDULE

This TI should be completed by September 30, 2010.

2515/180-07          EXPIRATION

This TI will expire March 31, 2011.

2515/180-08 CONTACT

For questions regarding the performance of this TI and emergent issues, contact: Mike Boggi at 301-415-5309 or [Michael.boggi@nrc.gov](mailto:Michael.boggi@nrc.gov); or Timothy Kobetz at 301-415-1932 or [Timothy.Kobetz@nrc.gov](mailto:Timothy.Kobetz@nrc.gov).

2515/180-09 STATISTICAL DATA REPORTING

All direct inspection effort expended on this TI is to be charged to 2515/180 with an IPE code of TI. Indirect inspection effort for preparation and documentation are to be charged to the inspection report number where the results of the inspection are documented, with an IPE code of TIP and TID respectively.

2515/180-10 ORIGINATING ORGANIZATION INFORMATION

10.01 Organizational Responsibility.

This TI was prepared by the Operator Licensing and Human Performance Branch (NRR/DIRS/IOLB), and issued by the Reactor Inspections Branch (NRR/DIRS/IRIB).

10.02 Resource Estimate.

The estimated direct inspection effort to perform this TI is 2 to 4 hours per site and will be performed at one site per utility. This TI may be performed by any qualified Inspector.

10.03 Training.

No formal training is proposed for the performance of this TI. The inspectors should be familiar with the information provided in Section 10.04, References.

10.04 References.

- NEI 06-11, Revision 1, "Managing Personnel Fatigue at Nuclear Power Reactor Sites," (ADAMS ML090360158)
- Regulatory Guide 5.73, "Fatigue Management for Nuclear Power Plant Personnel," (ADAMS ML083450028)
- 10 CFR 26, Subpart I, "Managing Fatigue"
- IP 93002, "Managing Fatigue"
- Web Based training module for Subpart I, Managing Fatigue.

END

Attachment 1  
Revision History Page

| Commitment Tracking Number | Issue Date            | Description of Change  | Training Needed | Comment Resolution Accession Number |
|----------------------------|-----------------------|--|-----------------|-------------------------------------|
| N/A                        | 10/07/09<br>CN 09-023 | Researched commitments for 4 years and found none.<br>This TI was created to provide inspection guidance related to inspection of licensees' implementation processes and procedures for 10 CFR 26, Subpart I, Managing Fatigue. | N/A             | ML092860262                         |