

September 24, 2009

MEMORANDUM TO: Eric J. Leeds, Director, Office of Nuclear Reactor Regulation
Brian W. Sheron, Director, Office of Nuclear Regulatory Research
Michael F. Weber, Director, Office of Nuclear Material Safety and Safeguards
Charles L. Miller, Director, Office of Federal and State Materials and Environmental Management Programs
Roy P. Zimmerman, Director, Office of Nuclear Security and Incident Response
Michael R. Johnson, Director, Office of New Reactors
Samuel J. Collins, Regional Administrator, Region I
Luis A. Reyes, Regional Administrator, Region II
Mark A. Satorius, Regional Administrator, Region III
Elmo E. Collins, Regional Administrator, Region IV

FROM: Cynthia A. Carpenter, Director /RA/
Office of Enforcement

SUBJECT: ENFORCEMENT GUIDANCE MEMORANDUM—DISPOSITIONING VIOLATIONS OF NRC REQUIREMENTS FOR WORK HOUR CONTROLS BEFORE AND IMMEDIATELY AFTER A HURRICANE EMERGENCY DECLARATION

Purpose:

The purpose of this enforcement guidance memorandum (EGM) is to provide guidance for the disposition of violations of U.S. Nuclear Regulatory Commission (NRC) requirements for work hour controls during conditions before and immediately after the declaration of an emergency for a hurricane, when licensees sequester plant staff on site to ensure personnel are available for relief of duties.

Background:

On March 31, 2008, the Commission published in the *Federal Register* (73 FR 16965) a final rule amending Title 10 of the *Code of Federal Regulations* (10 CFR) Part 26, "Fitness for Duty Programs." This rule included a new section, Subpart I, "Managing Fatigue," and an allowance to delay implementation of Subpart I to no later than October 1, 2009. These fatigue management requirements also provide licensees with the discretion to not meet the work hour scheduling and work hour control requirements of 10 CFR 26.205(c) and (d) during declared emergencies, as defined in the licensee's emergency plan."

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The NRC issued Regulatory Guide (RG) 5.73, "Fatigue Management for Nuclear Power Plant Personnel," in March 2009 which endorsed NEI 06-11, Revision 1, "Managing Personnel Fatigue at Power Reactor Sites," issued October 2008, with certain clarifications, additions, and exceptions.

NEI 06-11 specifies, in Section 11, "Exceptions," that licensees need not meet work hour scheduling and work hour control requirements during declared emergencies, as defined in the licensee's emergency plan. RG 5.73 endorsed Section 11 without clarifications, additions, or exceptions, and considers RG 5.73 and NEI 06-11 acceptable for use in implementing this specific part of the agency's regulations.

Discussion:

On July 15, 2009, during a public meeting regarding the licensees' implementation status for 10 CFR Part 26, Subpart I, the industry informed the NRC that, under impending hurricane conditions, licensees sequester enough site staff to provide relief for operations, maintenance, security, fire brigade and emergency preparedness personnel up to several days in advance of Emergency Declaration conditions. Typically, an Unusual Event, the lowest of the Emergency Declarations, is declared when wind speeds reach hurricane force of 74 miles per hour (mph). Unsafe travel conditions exist when sustained wind speeds are greater than 40 mph. Therefore, sequestering site personnel may be required well in advance of actually meeting the conditions for an Unusual Event.

The industry estimates that, on average for a hurricane situation, a single unit site will require approximately 150 personnel on site, and a dual unit site will require approximately 250 personnel on site, that are subject to the work hour control requirements. The licensee evacuates all other non-essential personnel from the site and expects them to return as soon as conditions allow. During the time that site staff is sequestered, before the declaration of an emergency, licensees would need to process numerous waivers for the work hour controls, to remain in compliance with 10 CFR 26.205(d)(1) through (d)(5)(i). The industry believes this will distract the operations and security managers during a time when they need to focus on site and personnel safety. Once the emergency is declared, licensees need not meet the work hour requirements specified in 10 CFR 26.205(c) and (d), as provided by 10 CFR 26.207(d).

On August 4, 2009, during a public meeting, the industry proposed a change to the rule to allow for an exception of work hour controls, similar to the exception provided during declared emergencies, to allow the licensee to sequester additional staff in preparation for and following a hurricane. Additionally, until the proposed rule change goes into effect, the industry requested enforcement discretion from the work hour controls when the site sequesters staff before and immediately after hurricane conditions that are expected to result in a declared emergency.

The staff reviewed industry's request and agreed that preparing sites for the onset of hurricane conditions, which includes sequestering enough essential personnel to provide for shift relief, is necessary to ensure plant and personnel safety and the common defense and security. As stated in the Statement of Considerations (73 FR 17148, March 31, 2008) for the rule related to 10 CFR Part 26, plant emergencies are extraordinary circumstances that may be most effectively addressed through staff augmentation. Furthermore, the objective of the temporary exemption of 10 CFR 26.207(d) is to ensure that the control of work hours and management of worker fatigue do not prevent a licensee from using whatever staff resources may be available

to respond to a plant emergency and to ensure that the plant reaches and maintains a safe and secure status. The staff notes that, because of the unpredictability of hurricane paths and the speed at which the hurricane approaches the site, high winds that make travel unsafe but fall below the threshold of an emergency could be in effect for several days. Additionally, after the hurricane has passed, the amount of damage to the plant and the surrounding area may prohibit the immediate return of offsite personnel to provide for shift relief and immediate compliance with work hour controls, even though wind conditions have subsided and the plant has exited its applicable emergency action level.

The NRC is providing guidance for exercising enforcement discretion for those licensees that are subjected to hurricane conditions and that take prudent and reasonable actions to sequester site personnel before declaring an emergency caused by high winds, as well as after the conditions have subsided when the resultant hurricane damage precludes the immediate return of off-site personnel. Additionally, it is expected that licensees have completed a reasonable amount of hurricane preparation prior to the need for sequestering personnel such that it minimizes personnel exposure to high winds.

The NRC will coordinate with external stakeholders on a future rulemaking to further evaluate this section of 10 CFR Part 26 and, if necessary, propose additional rulemaking to the Commission. Additionally, the staff will issue a Regulatory Issue Summary to inform licensees of this EGM by the start of the next hurricane season, June 1, 2010.

Actions:

The NRC staff considers the exercise of enforcement discretion prudent, because the actions to prepare for a hurricane, such as ensuring enough staff are on site to provide for relief of duties on a rotating basis, are part of managing fatigue. The discretion for 10 CFR 26.205(c) and (d) is similar to the exception allowed by 10 CFR 26.207(d) during a declared emergency. All other fitness-for-duty requirements for managing fatigue, such as self-declarations, fatigue assessments, and training, would remain in effect.

In accordance with the NRC Enforcement Policy, Section VII.B.6, "Violations Involving Special Circumstances," the NRC may exercise enforcement discretion and not cite licensees for violations of 10 CFR 26.205(c) and (d) while a licensee sequesters site personnel in preparation for hurricane conditions that are expected to result in the declaration of an emergency caused by high winds.

Additionally, after the licensee has exited the emergency declaration, the enforcement discretion may remain in effect until sufficient non-sequestered personnel capable of meeting the minimum shift staffing requirements, in compliance with the work hour requirements specified in 10 CFR 26.205(c) and (d), return to the site. Typically, this will occur within 72 hours of the exit from the declared emergency.

Conditions:

This discretion is reasonable if the licensee meets the following two conditions that should be in place before hurricane conditions arise:

- a. The licensee shall have site-specific procedural guidance that specifies the conditions necessary to sequester site personnel. The procedural guidance must contain provisions for ensuring that personnel who are not performing duties are provided an opportunity as well as accommodations for rest.
- b. The licensee has requested an exemption from 10 CFR 26.205(c) and (d), or any part thereof, to allow for sequestering site personnel before and immediately after a hurricane. If the licensee must sequester before an exemption has been submitted, the licensee must agree, in writing, to request the exemption no later than 6 months before the onset of the next hurricane season, as established by the National Oceanic and Atmospheric Administration's National Hurricane Center.

Immediate Actions:

Enforcement discretion may be granted for those instances when the following four conditions are met:

- (1) The licensee has determined that conditions warrant a site lockdown, such that nonessential personnel will remain off-site and essential personnel will remain on-site until the hurricane has passed and safe travel conditions exist. The licensee must also document this determination and the times and dates that it sequestered personnel.
- (2) Local weather conditions, as verified through a national weather service, will reasonably reach conditions to be hazardous to personnel safety for travel to or from the site (i.e., sustained wind conditions of greater than 40 mph).
- (3) The site is located within the National Hurricane Center's forecasted Hurricane Watch Area.
- (4) The licensee meets the conditions described in paragraphs a. and b. of the "Conditions" section above.

Violations associated with this enforcement discretion do not require discussion at an enforcement panel and do not require assignment of an enforcement action tracking number but shall be documented in an inspection report. Additionally, NRR has determined that, in general, circumstances that result in the need for this EGM do not constitute a performance deficiency and therefore, will not result in a finding in the Reactor Oversight Process. When exercising enforcement discretion in accordance with this EGM, the cover letter to the inspection report that discusses the violation should include the following or similar language:

A violation of 10 CFR 26.205(c) (or (d) depending on the specific circumstance) was identified. Because the violation occurred during the hurricane conditions specified in Enforcement Guidance Memorandum 09-008 (EGM-09-008) and, because the licensee was implementing the above conditions before a hurricane, as described in the EGM, the NRC is exercising enforcement discretion in accordance with Section VII.B.6, "Violations Involving Special Circumstances," of the NRC Enforcement Policy and is not issuing an enforcement action for this violation.

Long-Term Actions:

This EGM will be reviewed for consistency with approved exemption requests after three requests have been granted for the conditions specified in this document.

This enforcement discretion guidance will remain in effect until any of the following three conditions are met:

- (1) The staff has completed changes to applicable portions of 10 CFR Part 26, Subpart I, to exempt work hour controls during the sequestering of site personnel in preparation for or immediately following a hurricane, similar to 10 CFR 26.207(d).
- (2) All licensees that are potentially affected by hurricane conditions have received an approved exemption from the work hour controls during the sequestering of site personnel in preparation for or immediately following a hurricane, similar to 10 CFR 26.207(d).
- (3) Three years have elapsed since the effective date of this EGM.

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