

**U.S. Nuclear Regulatory Commission
Preliminary Proposed Rule Language**

Industry comments

§ 26.207 Waivers and exceptions.

(e) *Staff sequestration.* (1) A licensee may develop a sequestration plan that meets the requirements of appendix A of this part. A licensee that develops a sequestration plan shall submit the plan to the NRC under paragraph (e)(5) of this section 180 days before implementing the plan. The licensee need not meet the requirements of §§ 26.205(c) and (d) while operating under the NRC-approved sequestration plan. A licensee that develops changes to its sequestration plan shall submit the plan changes to the NRC under paragraph (e)(5) of this section 90 days before implementing the plan changes.

(2) While the sequestration plan is activated, the licensee shall only conduct activities critical to maintaining or restoring safe plant conditions or site security. ~~No discretionary maintenance is permitted while the sequestration plan is activated.~~

Basis for change: *Introducing the term “discretionary” only adds ambiguity to the previous statement.*

(3) Licensees that develop a sequestration plan shall maintain the plan and any changes to it until the Commission terminates the license for the nuclear power reactor.

(4) Any licensee that develops and submits a sequestration plan for NRC review shall develop procedures to implement its plan.

(5) Any licensee that develops and submits a sequestration plan for NRC review shall inform the NRC Headquarters Operations Center within 4 hours of its decision to either activate or deactivate its plan.

(6) Sequestration plans and any changes to sequestration plans must be submitted to the NRC Document Control Desk, with a copy to the appropriate Regional Office, and a copy to the appropriate NRC Resident Inspector if one has been assigned to the site of the facility. If the communication is on paper, the submission to the Document Control Desk must be the signed original.

APPENDIX A TO PART 26 – SEQUESTRATION PLANNING

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I. INTRODUCTION

Licensees subject to subpart I of this part are permitted under § 26.207(e) to develop a plan for sequestering individuals on-site shortly before, during, and shortly after forecastable naturally occurring events that may threaten access to the site. This appendix establishes minimum requirements for sequestration plans.

The potential for naturally occurring events to threaten access to nuclear power plants varies as a function of geography, typical weather patterns, and state and local government infrastructure. Additionally, the type of non-weather related emergencies likewise varies with the surrounding industry and transportation risks contained in the surrounding communities. Consequently, site-specific sequestration plans provide licensees the opportunity to sufficiently staff their facilities to ensure safe plant conditions and site security while also adequately managing fatigue of individuals at nuclear power plants.

Basis for change: *The introduction of non-weather-related emergencies is consistent with the discussion at the 1/28/13 public meeting. The initiating event causing the need for sequestration should not be attempted to be defined, yet the conditions where sequestration is necessary should be defined.*

II. CONTENTS OF SEQUESTRATION PLANS

The licensee's sequestration plan must contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth below, and the NRC shall evaluate the plan against those standards.

A. ~~Forecastable Natural Phenomena~~–Events That May Threaten Site Access

Sequestration may be required when a weather related event or non-weather related emergency occurs where access to and from the site may be limited or unsafe. The description in the plan should include conditions that the State and local infrastructure may not be unable to maintain safe access to the site.

Basis for change: *There is no need to further describe hypothetical events with the risk of not encompassing an event that will require sequestration yet not be included in this plan. Entry conditions will be described later.*

~~The licensee shall describe forecastable natural phenomena that may threaten access to the nuclear power plant for which the licensee intends this plan to be applicable. This description should include the impact of typical weather systems throughout the calendar year, including the ability of State and local infrastructure to maintain access to the site.~~

B. Activation Criteria

~~For each of the natural phenomena required to be described by paragraph II.A of this appendix, the licensee shall specify the conditions that must exist to activate the sequestration plan. These conditions must include, at a minimum, an active warning from an independent government agency indicating that access to the licensee's site may be restricted or individual travel to the site may be hazardous. Examples include, but need not be limited to, severe weather warnings and flood warnings from the National Weather Service.~~

The plan should describe the criteria upon which site leadership will base their decision to declare sequestration. There are two categories- projected sequestration and immediate sequestration.

Projected sequestration is declared upon the knowledge of a forecastable event being tracked through a government agency, primarily the National Oceanic and Atmospheric Administration (NOAA, National Weather Service (NWS), or other applicable government agency. This is usually a weather event however could be another hazard such as a toxic release, forest fires, or similar disaster. The sequestration is projected, planned and implemented within a 24-hour period of any government issued warnings or statements.

Immediate sequestration is required due to some on-site or off-site event of the moment that prevents a relief shift(s) from accessing the site. The present shift must be utilized for the duration of the event with limited relief capability. Events such as this may be weather related such as floods, heavy snow, or tornadic activity, or non weather related such as seismic toxic gas release, nearby nuclear emergency, train derailment, dam break, or similar disaster. A government notification, statement, or All Hazards Alert from NOAA will notify the site of such an event.

Basis for change: better define when a sequester event may be necessary and what activation criteria may be used. The All Hazards Alert is a defined process for NOAA that includes any issue that has significant impact on the health and safety of the public suchs as toxic gas release, large impact accident, or other wide-spread pubic health issue.

C. Individuals That Will Be Sequestered

~~The licensee shall specify the individuals, by role, position, or group, who will be sequestered while this plan is activated. Because many licensees are subject to various severe naturally occurring events, licensees may specify which different groups will be sequestered for different events.~~

The licensee shall describe the minimum shift requirements for a generic sequestration given power operations and outage operations for projected sequestrations. Also describe additional craft and subject matter experts that may be required given special circumstances and in order to sustain an extended sequestration (greater than 3 days).

Basis for change: *Since there are a number of events that can be hypothesized, describing participants down to the individual only drives larger numbers to upper bound those that may be needed. Describing the minimum shift required for either operations or outage will give the NRC a sense of the magnitude of the minimum. Describing the additional workers that may be needed for special circumstances and extended durations will provide an upper bound as to the numbers expected. Section E addresses that accommodations for restorative rest are provided, hence it will describe the facilities and space requirements.*

D. Decision Authority

The licensee shall specify the individual position with ultimate authority for deciding to activate or de-activate the sequestration plan. The individual position identified should be the Shift Manager or a senior site manager. ~~who is not included in the minimum staff requirements under § 50.54(m)(2)(i). In addition, the individual position identified shall remain sequestered on-site from the time the sequestration plan is activated until such time as the sequestration plan is deactivated.~~

Basis for change: *this is the same level of persons who can approve waivers. Absent of sequestration, waivers would have to be implemented, hence to require different is not consistent with the authority granted.*

E. Accommodations for Off-Shift Individuals

The licensee shall describe the accommodations that it will provide for individuals who are sequestered on site but not actively on shift. Licensees shall ensure that sequestered individuals have not only enough space but also an environment ~~sufficiently dark and quiet environment, so that they may get~~ to enable adequate rest before working their next shift.

Basis for change:

It is sufficient for the plan to describe how the accommodations will be structured rather than putting too much detail in the regulation.

F. Shift Scheduling

The licensee shall describe how it intends to schedule shifts for individuals being

sequestered. While activation of the sequestration plan exempts the licensee from the scheduling and work hour controls requirements of §§ 26.205(c) and (d), the licensee shall schedule shifts in an effort to reasonably manage the fatigue of sequestered individuals to the maximum extent possible, while ensuring safe plant conditions.

G. Non-discretionary Activities

Only non-discretionary activities are permitted during sequestration. The Operations Shift Manager or Security Shift Manager is responsible for determining what staff is necessary for minimum shift operations and shift security staffing is required as well as if a maintenance activity is non-discretionary. This means activities necessary for safe, stable plant operations (on-line or outage). Examples of maintenance activities that are to be considered non-discretionary are:

- Surveillances for Technical Specification compliance
- Maintenance needed to assure equipment needed for Technical Specifications is operable
- Maintenance needed to assure equipment needed for stable operation and plant security is functional.
- Protecting equipment required for safety, security, or power generation from potential storm damage
- Post-storm/event corrective maintenance to repair safety-related and security equipment to support restart of the units.
- Post-storm maintenance to restore the units to operable status to support restoration of power to the grid when required by electrical grid operators.

Basis for change: to permit safe, secure, stable plant operation or outage conditions during and post-event recovery. Additionally, to permit critical supply of electrical power to the electrical grid when required to support community recovery.

H. Deactivation Criteria

The licensee shall specify the conditions that must exist in order to deactivate the sequestration plan and resume operations in compliance with §§ 26.205(c) and (d). At a minimum, safe access to the site should be restored and relief personnel available and available for covered work. Restoring the plant to power operation, including reactor plant start-up or preparations thereto, must not be considered a deactivation criterion. Deactivation criteria must be established so that licensees sequester individuals for the minimum time possible, while maintaining a sufficient workforce for safe nuclear plant conditions.

~~H. Transitioning to Normal Operations~~

~~The licensee shall specify how it intends to return to a normal operating workforce once the criteria to deactivate the sequestration plan have been met. This plan must include provisions that ensure adequate off-site rest for individuals that were sequestered prior to their returning to the site. Under § 26.205(b)(3), hours worked while sequestered must be included in the~~

~~calculation of individuals' work hours.~~

Basis for change: *This section is unnecessary since new Section H states that a plan to deactivate includes coming back into compliance with all work hour rules. It is understood that no covered work can be performed, unless under a specific waiver, by individuals who have not been reset and in compliance with either the provisions of the minimum days off (outage or on-line) or the 54-hour average work hour rules.*