

RULEMAKING ISSUE

NOTATION VOTE

January 9, 2009

SECY-09-0007

FOR: The Commissioners

FROM: R. W. Borchardt
Executive Director for Operations

SUBJECT: PROPOSED RULE RELATED TO ENHANCEMENTS TO EMERGENCY
PREPAREDNESS REGULATIONS (10 CFR PART 50) (RIN 3150-AI10)

PURPOSE:

To obtain Commission approval to publish for public comment a proposed rule that would amend certain emergency preparedness (EP) requirements that govern domestic licensing of production and utilization facilities.

SUMMARY:

The enclosed proposed rule, "Enhancements to Emergency Preparedness Regulations," would codify certain voluntary protective measures contained in NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security Based Events," and other generically applicable requirements similar to those previously imposed by Commission orders. It would also amend other licensee emergency plan requirements based on a comprehensive review of the Nuclear Regulatory Commission's EP regulations and guidance. The proposed requirements would enhance the ability of licensee's in preparing to take and taking certain emergency preparedness and protective measures in the event of a radiological emergency; address, in part, security issues identified after the terrorist events of September 11, 2001; clarify regulations to effect consistent emergency plan implementation among licensees, and modify certain EP requirements to be more effective and efficient.

CONTACTS: Lauren M. Quinones, NRR/DPR
(301) 415-2007

Don R. Tailleart, NSIR/DPR
(301) 415-2966

BACKGROUND:

After the terrorist events of September 11, 2001, the NRC determined that it was necessary to require certain modifications of EP programs for operating power reactor licensees to ensure continued adequate protection of public health and safety. These modifications were issued to licensees via NRC Order EA-02-026, "Order for Interim Safeguards and Security Compensatory Measures," (Order EA-02-026), dated February 25, 2002. Order EA-02-026 was issued to the license holders of the 104 commercial nuclear power reactors in the United States.

The NRC evaluated the EP planning basis for nuclear power reactors given the changed threat environment. In SECY-03-0165, "Evaluation of Nuclear Power Reactor Emergency Preparedness Planning Basis Adequacy in the Post-9/11 Threat Environment," dated September 22, 2003 (not publicly available), the NRC staff reported to the Commission that the EP planning basis remained valid, including scope and timing issues. However, the NRC staff also recognized that security events, including EP response to such events, differ from accident events due to the challenges presented to emergency responders as a result of the security event. The NRC staff noted several EP issues that required further action to better respond to the post-September 11, 2001, threat environment.

On December 14, 2004, the NRC staff briefed the Commission on EP program initiatives. During the briefing, the NRC staff informed the Commission of its intent to conduct a comprehensive review of EP regulations and guidance. On February 25, 2005, in response to the Commission's staff requirements memorandum (SRM), SRM-M041214B, "Briefing on Emergency Preparedness Program Initiatives, 1:00 P.M., Tuesday, December 14, 2004, Commissioners' Conference Room, One White Flint North, Rockville, Maryland (Open to Public Attendance)," dated December 20, 2004, the NRC staff provided the Commission with a schedule of activities for the completion of the comprehensive review. The NRC staff, through SECY-05-0010, "Recommended Enhancements of Emergency Preparedness and Response at Nuclear Power Plants in Post-9/11 Environment," dated January 10, 2005 (not publicly available), requested Commission approval of the NRC staff's recommendations for enhancing, through new guidance documents, EP in the post-September 11, 2001 threat environment. In its SRM to SECY-05-0010, dated May 4, 2005 (not publicly available), the Commission directed the staff to provide the results of a comprehensive review of EP regulations and guidance. That memorandum also approved the staff's recommendation to proceed with enhancements to EP issues as described in SECY-05-0010. As a result, the staff issued Bulletin 2005-02 (BL-05-02), "Emergency Preparedness and Response Actions for Security-Based Events," dated July 18, 2005, which recommended enhancements that licensees could integrate into EP programs at power reactors. BL-05-02 also sought to obtain information from licensees on their actions taken to implement Order EA-02-026 and to modify their EP programs to adjust to the current threat environment. Based on the results of the post BL-05-02 inspections, meetings with members of the nuclear power industry, and licensees' responses to BL-05-02, the NRC determined that licensees were implementing strategies to satisfy Order EA-02-026 and enhance their programs to address the changed threat environment.

The NRC staff provided the results of its review to the Commission in SECY-06-0200, "Results of the Review of Emergency Preparedness Regulations and Guidance," dated September 20, 2006. In that paper, the NRC staff discussed the activities it had conducted to complete its review and recommended rulemaking for enhancements to the EP program. The staff divided the potential enhancements into two categories: hostile action EP issues and other

EP issues. The NRC staff evaluated each issue and assigned it a priority of high, medium, or low based on an analysis of the issue's relationship to reactor safety, physical security, EP, NRC strategic goals of openness and effectiveness, and stakeholder impact. The NRC staff identified 12 issues with a high priority, including 6 security related EP issues and 6 non-security related EP issues. The NRC staff recommended that the Commission approve rulemaking as the most effective and efficient means to ensure that the high priority EP issues were resolved with an opportunity for participation by all interested stakeholders.

In its SRM to SECY-06-0200, dated January 8, 2007, the Commission approved the NRC staff's recommendation to pursue rulemaking and guidance changes for enhancements to the EP program. In an April 17, 2007, memorandum from the Executive Director for Operations, the staff provided its rulemaking plan to the Commission. Later, when preparing the proposed rule, the staff identified similarities between two issues known in the rulemaking plan as "collateral duties" and "shift staffing and augmentation." As a consequence, these issues have been partially combined in this proposed rule. The NRC is now considering non-rulemaking options for some of the elements of shift staffing and is also requesting stakeholder comments in Section V of the Federal Register Notice. Also, in addition to the issues identified in the rulemaking plan, one administrative change has been added to remove certain one-time requirements that all licensees have completed.

DISCUSSION:

The proposed amendments to the EP requirements would result in changes to the following existing sections and appendices in Part 50:

- 10 CFR 50.47, "Emergency plans"
- 10 CFR 50.54, "Conditions of licenses"
- 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities"

The proposed amendments would require holders of licenses under 10 CFR Part 50 that are currently subject to EP requirements, applicants for operating licenses under 10 CFR Part 50, or applicants for combined licenses under 10 CFR Part 52, to ensure that their EP programs meet the amended EP requirements. The proposed amendments would similarly apply to applicants for construction permits under Part 50 in their discussion of preliminary plans for coping with emergencies (§50.34(a)(10)) and to applicants for early site permits under Part 52 that choose to propose either major features of an, or a complete and integrated, emergency plan (10 CFR 52.17(b)(2)). The proposed amendments are summarized as follows. The first six are security-related issues associated with Order EA-02-026 or BL-05-02, five are non-security-related issues resulting from the comprehensive review of EP regulations and guidance, and one administrative:

1. On-Shift Multiple Responsibilities – The proposed requirements would explicitly limit duties assigned to on-shift emergency response organization (ERO) personnel to ensure

- that these emergency responders do not become overburdened during an emergency event. These proposed requirements would be incorporated into 10 CFR Part 50, Appendix E, Section IV.A.
2. Emergency Action Levels (EALs) for Hostile Action Events – The proposed requirements would amend regulations to require licensees to have EALs for hostile action events. These proposed requirements would be incorporated into 10 CFR Part 50, Appendix E, Section IV.B.
 3. Emergency Response Organization Augmentation and Alternate Facilities – The proposed requirements would amend regulations to require licensees to identify alternative facilities to support ERO augmentation during hostile action events. This would codify the ICM requirements and the enhancement examples described in BL-05-02. These proposed requirements would be incorporated into 10 CFR Part 50, Appendix E, Section IV.E.
 4. Licensee Coordination with Offsite Response Organizations (ORO) During Hostile Action Events – The proposed requirements would amend regulations to require licensees to ensure ORO personnel assigned emergency plan implementation duties would be available to do so during hostile action events. These proposed requirements would be incorporated into 10 CFR Part 50, Appendix E, Section IV.A.7.
 5. Protection for Onsite Personnel – The proposed requirements would amend regulations to require specific emergency plan provisions to protect onsite emergency responders, and other onsite personnel, in emergencies resulting from hostile action events at nuclear power plants. These proposed requirements would be incorporated into 10 CFR Part 50, Appendix E by creating a new Section I.
 6. Challenging Drills and Exercises – The proposed requirements would amend regulations to require licensees to include hostile action event scenarios in drills and exercises and submit the scenarios for NRC review and approval. These proposed requirements would be incorporated into 10 CFR Part 50 Appendix E, Section IV.F.
 7. Backup Means for Alert and Notification Systems – The proposed requirements would amend regulations to require licensees to have backup measures that would be implemented when the primary means of alerting and notification are unavailable. These proposed requirements would be incorporated into 10 CFR Part 50, Appendix E, Section IV.D.3.
 8. Emergency Classification Timeliness – The proposed requirements would amend regulations to ensure that licensees are able to complete emergency classifications in a timely manner in the event of a radiological emergency. These proposed requirements would be incorporated into 10 CFR Part 50, Appendix E, Section IV.C.
 9. Emergency Operations Facility – Performance Based Approach – The proposed requirements would amend regulations to provide performance-based criteria for consolidated EOFs. The NRC is also proposing revisions to regulations to remove the references to an EOF as a “near-site” facility and to incorporate specific EOF distance criteria into the regulations. These proposed requirements would be incorporated into

10 CFR 50.47(b)(3), 10 CFR 50.47(d)(1), 10 CFR 50.54(gg)(1)(i); and 10 CFR Part 50, Appendix E, Sections IV.E.8, IV.E.9.c, and IV.E.9.d.

10. Evacuation Time Estimate (ETE) Updating – The proposed requirements would amend regulations to require licensees to review ETEs periodically. These proposed requirements would be incorporated into 10 CFR 50.47(b)(10) and 10 CFR Part 50, Appendix E, Section IV.
11. Amended Emergency Plan Change Process – The proposed requirements would ensure that (1) the effectiveness of the emergency plans would be maintained, (2) changes to the approved emergency plan would be properly evaluated, and (3) any change that reduces the effectiveness of the plan would be reviewed by the NRC prior to implementation. These proposed requirements would be incorporated into 10 CFR 50.54(q) and 10 CFR Part 50, Appendix E, Section IV.B.
12. Removal of Completed One-Time Requirements – The NRC staff is proposing to amend regulations to eliminate several regulatory provisions that required holders of licenses to take certain one-time actions to improve the state of EP following the Three Mile Island incident in 1979. These actions are complete and the requirements are no longer binding on any current licensee. The completed one-time requirements would be removed from 10 CFR 50.54(r), 10 CFR 50.54(s)(1), 10 CR 50.54(s)(2)(i), and 10 CFR 50.54(u).

This proposed rule would also require changes to docketed applications for new reactors. The current schedules for this rulemaking and for currently docketed combined license applications (COLAs), or anticipated early site permit (ESP) applications and COLAs, are such that the applications would be in various phases of NRC staff review, possibly as far along as the final hearing phase, when the Commission promulgates this rule as final. The staff has determined that any adverse impact of these changes on ESPs and COLAs can be managed through close communication with ESP and COL applicants and timely submission of the necessary changes to those applications.

The Commission should be aware that there are staff members that have views different than those presented in this paper with regard to one of the proposed changes (i.e., the changes to the process for reviewing changes to emergency plans as summarized in number 11 above.) These views are summarized in Enclosure 6 and will be addressed in the rulemaking process. The Office of the General Counsel has advised the staff that proposed changes to an emergency plan that would reduce the effectiveness of the plan must be submitted for NRC approval through a license amendment request.

Guidance Documents

The NRC staff expects to publish draft guidance documents for review and comment in conjunction with the proposed rule. Comments on the proposed guidance will be considered by the NRC in the development of the final guidance documents. The staff intends to keep power reactor license applicants aware of the development of the associated implementation guidance, including planned public meetings and posting draft implementing guidance on the NRC web site. The final guidance documents will accompany the proposed final rule.

Public Input to the Proposed Rule

In an effort to conduct a rulemaking that is transparent and open to stakeholder participation, the NRC engaged stakeholders through various means during the development of this proposed rule. The NRC staff met with internal and external stakeholders, including FEMA management, on numerous occasions starting in 2005. Also, the staff posted draft rule language on the e-rulemaking website, <http://www.regulations.gov>, on February 29, 2008, and solicited stakeholder comments. The NRC received three comment letters. One comment letter was submitted by the State of Pennsylvania, one was submitted by the Nuclear Energy Institute, and one was submitted by the Union of Concerned Scientists on behalf of several non-governmental organizations. The NRC considered the comments received on the draft rule language in the process of developing the proposed rule. The NRC staff hosted a public meeting on March 5, 2008, to discuss the draft rule language, and on July 8, 2008, to discuss comments received on the draft rule language. The NRC staff plans to hold additional public meetings following the publication of the proposed rule in the *Federal Register*. Enclosure 5 summarizes the comments received and the NRC's resolution of those comments.

COMMITMENT:

The staff plans to publish this proposed rule in the *Federal Register* in February 2009. After consideration of public comments, the staff plans to submit the final rule to the Commission for consideration in December 2009. This schedule was approved by the Executive Director for Operations on April 17, 2007.

RESOURCES:

Staff estimates that the total resources required for FY 2009 are 4.5 Full Time Equivalent (FTE) and \$250,000, and for FY 2010 are 3.4 FTE and \$250,000. The following resources are included in the FY 2009 President's Budget and FY 2010 budget request:

NRR: FY 2009 - 1.2 FTE, FY 2010 - 0.4 FTE

NSIR: FY 2009 - 2.5 FTE and \$250,000 (\$35K is subject to a FY 2009 Appropriation),
FY 2010 - 2.5 FTE and \$250,000

OGC: FY 2009 - 0.4 FTE (subject to a FY 2009 Appropriation), FY 2010 - 0.1 FTE

NRO: FY 2009 - 0.1 FTE, FY 2010 - 0.1 FTE

ADM: FY 2009 - 0.1 FTE

FSME: FY 2009 - 0.2 FTE (subject to a FY 2009 Appropriation), FY 2010 - 0.3 FTE

\$35K for this activity are deferred for NSIR under the six month FY 2009 Continuing Resolution (CR). 0.4 FTE is deferred for OGC under a one year CR. 0.2 FTE is deferred for FSME under a six month and one year CR. These resources are subject to a FY 2009 appropriation.

RECOMMENDATIONS:

The staff recommends that the Commission take the following actions:

1. Approve for publication in the *Federal Register* the proposed amendment to 10 CFR Part 50 (Enclosure 1).
2. Certify that this rule, if promulgated, will not have a significant economic impact on a substantial number of small entities in order to satisfy requirements of the Regulatory Flexibility Act (5 U.S.C. 605(b)).
3. Take note of the following:
 - a. The proposed rule will be published in the *Federal Register* for a 75-day comment period.
 - b. A draft regulatory analysis has been prepared (Enclosure 2).
 - c. A draft environmental assessment and finding of no significant impact has been prepared (Enclosure 4).
 - d. This proposed rule creates new information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). The staff will submit this rule to the Office of Management and Budget (OMB) for review and approval of the paperwork requirements (Section XIII of Enclosure 1). A draft OMB supporting statement has been prepared (Enclosure 3).
 - e. The appropriate Congressional committees will be informed.
 - f. The Office of Public Affairs will issue a press release.

COORDINATION:

The Office of the General Counsel has no legal objection to the proposed rule. The Office of the Chief Financial Officer has reviewed the proposed rule for resource implications and has no objections.

The Office of Information Services has reviewed the proposed rule and has no objections to the changes in information collection requirements.

/RA/

R. W. Borchardt
Executive Director
for Operations

Enclosures:

1. *Federal Register* Notice
2. Draft Regulatory Analysis and Backfit Analysis
3. Draft OMB Supporting Statement
4. Environmental Assessment
5. Summary and Analysis of Public
Comments on the Draft Rule Language
6. Concerns of Some Members of the Staff Regarding
Proposed Emergency Preparedness Rulemaking

The Office of Information Services has reviewed the proposed rule and has no objections to the changes in information collection requirements.

/RA/

R. W. Borchardt
Executive Director
for Operations

Enclosures:

1. *Federal Register* Notice
2. Draft Regulatory Analysis and Backfit Analysis
3. Draft OMB Supporting Statement
4. Environmental Assessment
5. Summary and Analysis of Public Comments on the Draft Rule Language
6. Concerns of Some Members of the Staff Regarding Proposed Emergency Preparedness Rulemaking

WITS 200700138/ EDATS: OEDO-2007-0164

ADAMS Accession No: ML082890481(Package); ML082820533 (SECY Paper);

* Via E-Mail

** Via Memo

OFFICE	NRR:DPR:PFPB:PM	NRR:DPR:PFPB:BC	NRR:ADRO:DPR:D	NSIR:DPR: D	NRO:DNRL*
NAME	LQuinones	RCarlson	MCase	MLeach	DMatthews (ASnyder for)
DATE	12/10/08	12/10/08	10/20/08	10/22/08	10/29/08
OFFICE	NRO: D*	OE: D	OIS: D*	ADM/ tech editor**	CFO: D*
NAME	MJohnson (ASnyder for)	CCarpenter (RStarkey for)	TBoyce (GTrussell for)	MLesar	JDyer (RMitchell for)
DATE	10/ 29/08	11/ 04/08	11/26/08	11 /07/08	11/12/08
OFFICE	NSIR: D	OGC NLO	NRR: D	EDO	
NAME	RZimmerman (WDean for)	BJones	ELeeds (BBoger for)	RBorchardt	
DATE	11/13/08	12/08/08	12/15/08	1/9/09	

OFFICIAL RECORD COPY