

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

RIN: 3150 - AD40

Emergency Planning and Preparedness
Exercise Requirements for Nuclear Power Plants

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its emergency planning regulations in order to update the Commission's emergency planning exercise requirements for nuclear power plants and clarify ambiguities that have surfaced in the implementation of the regulations. These amendments also make the NRC regulations consistent with FEMA regulations.

EFFECTIVE DATES: 90 days after publication in the Federal Register.

FOR FURTHER INFORMATION CONTACT: Michael T. Jamgochian, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301-492-3918).

SUPPLEMENTARY INFORMATION:

BACKGROUND

On August 19, 1980 (45 FR 55402), the NRC published a final rule that revised its emergency planning regulations. The final rule became effective on November 3, 1980. On July 6, 1984 (49 FR 27733), the NRC amended its emergency planning regulations to relax the frequency of participation by State and local governmental authorities in emergency preparedness exercises at nuclear power reactor sites. The amendments were based on the NRC's experience gained in observing and evaluating emergency preparedness exercises since 1980.

Further experience has shown that the language setting forth the requirements in 10 CFR Part 50, Appendix E, Section IV.F.3 concerning full or partial participation by State or local governments in the biennial (offsite) exercise is unnecessarily complicated. The NRC published a notice of proposed rulemaking in the Federal Register on June 28, 1993 (58 FR 34539). Public comments were requested by September 13, 1993. The proposed rule did not seek to change the requirements set forth in Appendix E, Section IV.F.3 (a), (b), and (d) but to clarify and simplify the text of the regulation. Offsite authority responsibilities remain unchanged.

Under the proposed rule the offsite plans for each site were to be exercised biennially with full participation by each offsite authority having a role under the plan. Further, where the offsite authority has a role under the plan for more than one site, it would be required to participate in one exercise fully every two years and partially participate in other offsite plan

exercises in this period. The only amended requirements were those set forth in Appendix E, Section IV.F.3(e) where the interval for an ingestion exposure pathway exercise was changed from 5 to 6 years, and Appendix E, Section IV.F.3(c) where the requirement that all States within the plume exposure pathway emergency planning zone (EPZ) for a given site fully participate in an offsite exercise for that site at least once every 7 years was deleted.

Public Comments

A total of 12 comment letters were received, of which 5 were from utilities, 6 were from State emergency management agencies and one from NUMARC. All commenters generally agreed with the proposed rulemaking except for one State agency.

Comment. The one commentor that opposed the rule change noted that,

"We do not believe, however, the NRC has substantiated its claim that the seven-year return requirement is unnecessary. Similar arguments have surfaced in previous emergency planning issues, and our response is the same: the high level of industry sensitivity to emergency preparedness is a direct result of comprehensive requirements for emergency preparedness programs and exercises. Elimination of those requirements runs the risk of returning the industry to pre--TMI levels of preparedness."

Response. The Commission does not agree that deleting the 7 year return frequency "... runs the risk of returning the industry to pre-TMI levels of preparedness." The Commission is confident that this will not occur because the Commission has found that multi-sites states, when not fully participating in an exercise at a specific site will usually partially participate at a significant level of activity every 2 years at that specific site in order to support the participation of the appropriate local governments. The Commission has found that this level of exercise participation provides adequate emergency response training for State and local governments. The Commission believes that this rulemaking does not have an adverse impact on public health and safety because State emergency response personnel continuously respond to actual emergencies and experience has shown that states through a combination of full and partial participation exercises maintain an adequate level of response capability. A formal requirement for a State to return to a specific site every 7 years to participate in an exercise has proven to be unnecessary. Nonetheless, nothing prevents a State from returning to a specific site to participate in an exercise whenever it deems warranted.

Comment. Several comments suggested additional clarification to the emergency planning regulations.

Response. Although the Commission always appreciates suggestions on clarifying its regulations, the Commission at this time believes that all of the suggested changes would be inappropriate to include in this rulemaking

proceeding because the suggested revisions are beyond the scope of this rulemaking.

Comment. Several commenters noted that the proposed wording for the ingestion pathway exercise was not consistent with the FEMA requirement and could be interpreted differently than intended. They suggested the following requirement, "A State should fully participate in the ingestion pathway portion of exercises at least once every six years. In States with more than one site, the State should rotate this participation from site to site."

Response. The Commission agrees with the suggested wording and has incorporated this comment in the final rule.

Discussion

The Commission finds that the current regulation has resulted in a relatively complicated description of the requirements for exercise participation by State and local governments who have offsite planning responsibility for more than one nuclear power plant. This final rule simplifies and clarifies this requirement. In addition, Appendix E is revised to reflect that the interval for an ingestion exposure pathway exercise be changed from at least once every 5 years to at least once every 6 years (FEMA's ingestion pathway exercise requirement is at least once every 6 years). The change in the interval would match the biennial frequency required for exercises of offsite plans. Further, Appendix E is also revised to eliminate the 7 year return frequency requirement because it has proven to be unnecessary to achieve the underlying

purpose of the rule as well as being burdensome to states which are within the plume exposure pathway for multiple sites (FEMA does not have a return frequency requirement). Both changes assure compatibility with FEMA requirements and thus avoid confusion among licensees and State governments. Notwithstanding elimination of the 7 year return frequency requirement, the Commission believes that offsite authorities should rotate their full participation in exercises among sites if they are within the plume exposure pathway for more than one site.

The Commission codified the 7 year return frequency in the July 6, 1984 (49 FR 27733), amendment to the emergency planning regulations. This amendment provides that at least once every 7 years, all States within the plume exposure pathway EPZ of a given site must fully participate in an offsite exercise for that site. In doing so, the Commission noted that "the final rule is not totally consistent with FEMA's final regulation (44 CFR Part 350). This inconsistency lies in the area of return frequency of multiple-site states as previously discussed. The FEMA position on return frequency is a significant departure from the NRC's proposed regulation of July 21, 1983 (48 FR 33307). The Commission believes that more study is needed before deletion of the return frequency requirement can be justified."

The Commission now believes that sufficient experience has been gained in the observation and evaluation of emergency preparedness exercises at nuclear power reactor sites to conclude that the 7 year return frequency should be deleted.

The Commission has found that multi-site States, when not fully participating in an exercise at a specific site will usually partially participate at a significant level of activity every 2 years at that specific site in order to support the participation of the appropriate local governments. The Commission has found that this level of exercise participation provides adequate emergency response training for State and local governments. Additionally, a provision still exists in the regulation which permits State or local government participation in any licensee's drills or exercises. A State or local government may consider its response capability to be less than optimal because of an unusually large personnel turnover or because there have been limited responses to real emergencies in the community. The regulation still requires the licensees to provide for State or local government participation if they indicate such a desire. This final revision does not have any adverse impact on public health and safety because State emergency response personnel continuously respond to actual emergencies and experience has shown that states through a combination of full and partial participation exercises maintain an adequate level of response capability. A formal requirement for a State to return to a specific site every 7 years to participate in an exercise has proven to be unnecessary. This rulemaking deletes that unnecessary, unwarranted and burdensome requirement. Nonetheless, nothing prevents a State from returning to a specific site to participate in an exercise whenever it deems warranted.

Lastly, this revision deletes past due dates [see Section F(2) (a)] because they are now meaningless.

FEMA concurs with the amendments in this rulemaking.

Finding of No Significant Environmental Impact: Availability

The Commission has determined under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51, that this rule is not a major Federal action significantly affecting the quality of the human environment; and therefore, an environmental impact statement is not required. This regulation updates and clarifies the emergency planning regulations relating to exercises. It does not involve any modification to any plant or revise the need for or the standards for emergency plans, and there is no adverse effect on the quality of the environment. The environmental assessment and finding of no significant impact on which this determination is based are available for inspection at the NRC Public Document Room, 2120 L Street NW (Lower Level), Washington, DC, 20036.

Paperwork Reduction Act Statement

This final rule does not contain a new or amended information collection requirement subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). Existing requirements were approved by the Office of Management and Budget approval number 3150-0011.

Regulatory Analysis

The Commission has prepared a regulatory analysis on this regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The analysis is available for inspection in the NRC Public Document Room, 2120 L Street NW (Lower Level), Washington, DC 20036. Single copies of the analysis may be obtained from Michael Jamgochian, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Telephone: (301) 492-3918.

Regulatory Flexibility Act Certification

The regulation does not have a significant impact on a substantial number of small entities. The final rule updates and clarifies ambiguities in the emergency planning regulations relating to exercises. Nuclear power plant licensees do not fall within the definition of small business in Section 3 of the Small Business Act, 15 U.S.C. 632, the Small Business Size Standards of the Small Business Administration in 13 CFR Part 121, or the Commission's Size Standards published at 56 FR 56671 (November 6, 1991). Therefore, in accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission hereby certifies that this final rule, will not have a significant economic impact on a substantial number of small entities and that, therefore, a regulatory flexibility analysis need not be prepared.

Backfit Analysis

This regulation does not impose any new requirements on production or utilization facilities. The regulation deletes the requirement that all states within the plume exposure pathway EPZ for a given site fully participate in an offsite exercise for that specific site at least every 7 years. It also relaxes the requirement to perform an ingestion exposure pathway exercise from every 5 years to every 6 years. These changes would permit, but do not require, licensees to change their emergency plans and procedures. Therefore, these changes are not considered backfits as defined in 10 CFR 50.109 (a)(1).

List of Subjects

Antitrust, Classified information, Criminal penalties, Fire protection, Incorporation by reference, Intergovernmental relations, Nuclear power plants and reactors, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

For the reasons set out in the preamble, and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 552 and 553, the NRC is adopting the following amendments to 10 CFR Part 50.

PART 50 - DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

1. The authority citation for Part 50 continues to read as follows:

Authority: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 1244, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, Sec. 2902, 106 Stat. 3123, (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C. 2131, 2235), sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Section 50.13, 50.54 (dd) and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80, 50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

2. Appendix E to Part 50 is amended by revising Section IV.F. to read as follows:

APPENDIX E to Part 50 - Emergency Planning and Preparedness for Production and Utilization Facilities.

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IV. Content of Emergency Plans

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F. Training.

1. The program to provide for: (a) The training of employees and exercising, by periodic drills, of radiation emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties, and (b) The participation in the training and drills by other persons whose assistance may be needed in the event of a radiation emergency shall be described. This shall include a description of specialized initial training and periodic retraining programs to be provided to each of the following categories of emergency personnel:

- i. Directors and/or coordinators of the plant emergency organization;
- ii. Personnel responsible for accident assessment, including control room shift personnel;
- iii. Radiological monitoring teams;

- iv. Fire control teams (fire brigades);
- v. Repair and damage control teams;
- vi. First aid and rescue teams;
- vii. Medical support personnel;
- viii. Licensee's headquarters support personnel;
- ix. Security personnel.

In addition, a radiological orientation training program shall be made available to local services personnel; e.g., local emergency services/Civil Defense, local law enforcement personnel, local news media persons.

2. The plan shall describe provisions for the conduct of emergency preparedness exercises as follows: Exercises shall test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public notification system, and ensure that emergency organization personnel are familiar with their duties.³

³Use of site specific simulators or computers is acceptable for any exercise.

- a. A full participation⁴ exercise which tests as much of the licensee, State and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located. This exercise shall be conducted within two years before the issuance of the first operating license for full power (one authorizing operation above 5% of rated power) of the first reactor and shall include participation by each State and local government within the plume exposure pathway EPZ and each state within the ingestion exposure pathway EPZ. If the full participation exercise is conducted more than one year prior to issuance of an operating license for full power, an exercise which tests the licensee's onsite emergency plans shall be conducted within one year before issuance of an operating license for full power. This exercise need not have State or local government participation.
- b. Each licensee at each site shall annually exercise the onsite emergency plan.

⁴"Full participation" when used in conjunction with emergency preparedness exercises for a particular site means appropriate offsite local and State authorities and licensee personnel physically and actively take part in testing their integrated capability to adequately assess and respond to an accident at a commercial nuclear power plant. "Full participation" includes testing major observable portions of the onsite and offsite emergency plans and mobilization of state, local and licensee personnel and other resources in sufficient numbers to verify the capability to respond to the accident scenario.

- c. Offsite plans for each site shall be exercised biennially with full participation by each offsite authority having a role under the plan. Where the offsite authority has a role under a radiological response plan for more than one site, it shall fully participate in one exercise every two years and shall, at least, partially participate⁵ in other offsite plan exercises in this period.

- d. A State should fully participate in the ingestion pathway portion of exercises at least once every six years. In States with more than one site, the State should rotate this participation from site to site.

- e. Licensees shall enable any State or local government located within the plume exposure pathway EPZ to participate in annual exercises when requested by such State or local government.

- f. Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, in consultation with FEMA, cannot find reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency. The extent of State and local

⁵"Partial participation" when used in conjunction with emergency preparedness exercises for a particular site means appropriate offsite authorities shall actively take part in the exercise sufficient to test direction and control functions; i.e., (a) protective action decision making related to emergency action levels, and (b) communication capabilities among affected State and local authorities and the licensee.

participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.


- g. All training, including exercises, shall provide for formal critiques in order to identify weak or deficient areas that need correction. Any weaknesses or deficiencies that are identified shall be corrected.

- h. The participation of State and local governments in an emergency exercise is not required to the extent that the applicant has identified those governments as refusing to participate further in emergency planning activities, pursuant to 10 CFR 50.47(c)(1). In such cases, an exercise shall be held with the applicant or licensee and such governmental entities as elect to participate in the emergency planning process.

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Dated at Rockville, Maryland, this 14th day of March, 1994.

For the Nuclear Regulatory Commission.


James M. Taylor,
Executive Director for Operations.

CONGRESSIONAL CORRESPONDENCE SYSTEM
DOCUMENT PREPARATION CHECKLIST

This checklist is to be submitted with each document (or group of Qs/As) sent for filing into the CCS.

1. BRIEF DESCRIPTION OF DOCUMENT(S) As to Rep Lehman
2. TYPE OF DOCUMENT Correspondence Hearings (Qs/As)
3. DOCUMENT CONTROL Sensitive (NRC Only) Non-sensitive
4. CONGRESSIONAL COMMITTEE and SUBCOMMITTEES (if applicable)

Congressional Committee

Subcommittee
5. SUBJECT CODES
(a) _____
(b) _____
(c) _____
6. SOURCE OF DOCUMENTS
(a) _____ 5520 (document name _____)
(b) Scan- (c) _____ Attachments
(d) _____ Rekey (e) _____ Other _____
7. SYSTEM LOG DATES
(a) 4/15/94 Date OCA sent document to CCS
(b) _____ Date CCS receives document
(c) _____ Date returned to OCA for additional information
(d) _____ Date resubmitted by OCA to CCS
(e) _____ Date entered into CCS by _____
(f) _____ Date OCA notified that document is in CCS
8. COMMENTS 55072