[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

RIN: 3150-AH00

Emergency Planning and Preparedness For Production And Utilization Facilities

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its emergency planning regulations governing the domestic licensing of production and utilization facilities. The final rule amends the current regulations as they relate to NRC approval of licensee changes to Emergency Action Levels (EALs). The final rule also clarifies exercise requirements for co-located licensees. These amendments are intended to resolve an inconsistency and an ambiguity in current regulations.

EFFECTIVE DATE: (Insert Date, 90 days after publication in the *Federal Register*)

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SUPPLEMENTARY INFORMATION:

The Commission is making two changes to its emergency preparedness regulations contained in 10 CFR Part 50, Appendix E. The first amendment relates to NRC approval of

licensee changes to EALs, paragraph IV.B and the second amendment relates to exercise requirements for co-located licensees, paragraph IV.F.2. A discussion of each of these revisions follows.

(1) NRC APPROVAL OF LICENSEE CHANGES TO EALs, 10 CFR PART 50, APPENDIX E, PARAGRAPH IV.B.

EALs are part of a licensee's emergency plan. There is an inconsistency in the emergency planning regulations regarding the threshold for when NRC approval of nuclear power plant licensee changes to EALs is required. Section 50.54(q) states that licensees may make changes to their emergency plans without Commission approval only if the changes "do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of § 50.47(b) and the requirements of Appendix E" to 10 CFR Part 50. By contrast, Appendix E states that "emergency action levels shall be...approved by NRC." Current industry practice follows the provisions of § 50.54(q). Industry has generally made and implemented revisions to EALs without requesting NRC approval after determining that the changes do not decrease the effectiveness of the emergency plan. When the determination is made that a change constitutes a decrease in effectiveness, licensees submit the changes to the Commission for approval. If a change involves a major change to the EAL scheme, for example, changing from an EAL scheme based on NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," guidance to an EAL scheme based on NUMARC/NESP-007, "Methodology for Development of Emergency Action Levels," or NEI-99-01, "Methodology for Development of Emergency Actions Levels," guidance or if the license proposes an alternate method for complying with the regulations, the industry practice has been to seek NRC review and approval before implementing the change.

The Commission believes that prior NRC approval of every EAL change is not necessary to provide reasonable assurance that EALs will continue to provide an acceptable level of safety. This final amendment focuses on EAL changes that are of sufficient significance that a safety evaluation by the NRC is appropriate before the licensee may implement the change. The Commission believes that EAL changes that reduce the effectiveness of the emergency plan are of sufficient regulatory significance that prior NRC review and approval is warranted. This standard is the same standard that the current regulations provide for when determining whether changes to emergency plans (except EALs) require NRC review and approval. As such, this regulatory threshold has a long history of successful application. Therefore, this standard should also be used for EAL changes. On the basis of NRC's inspections of emergency plans, including EAL changes, the Commission believes that licensees have generally made appropriate determinations regarding whether an EAL change reduces the effectiveness of the emergency plan and that licensees have the capability to continue to do so. Limiting the NRC's approval to EAL changes that reduce the effectiveness of emergency plans or to an alternate method for complying with the regulations will ensure adequate NRC oversight of licensee-initiated EAL changes. This both increases regulatory effectiveness (through use of a single consistent standard for evaluating all emergency plan changes) and reduces unnecessary regulatory burden on licensees (who would not be required to submit for approval EAL changes that do not decrease the effectiveness of the emergency plan).

The Commission believes a licensee's proposal to convert from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007 or NEI-99-01 based) or to a proposed alternate method for complying with the regulations is of sufficient significance to require prior NRC review and approval. NRC review and approval for such

major changes in EAL methodology is necessary to ensure that there is reasonable assurance that the final EAL change will provide an acceptable level of safety.

Accordingly, the Commission is revising Appendix E to 10 CFR Part 50 to provide that Commission approval of EAL changes is necessary for all EAL changes that decrease the effectiveness of the emergency plan and for changing from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007 or NEI-99-01-based) or for a proposal of an alternate method for complying with the regulations.

(2) EXERCISE REQUIREMENTS FOR CO-LOCATED LICENSEES, 10 CFR PART 50, APPENDIX E, PARAGRAPH IV.F.

The emergency planning regulations were significantly upgraded in 1980 after the accident at Three Mile Island (45 FR 55402; August 19, 1980). The upgraded 1980 regulations required an annual exercise of the onsite and offsite emergency plans. The regulations were amended in 1984 to change the frequency of participation of state and local governmental authorities in nuclear power plant offsite exercises from annual to biennial (49 FR 27733; July 6, 1984). The regulations were amended in 1996 to change the frequency of exercising the licensees' onsite emergency plans from annual to biennial (61 FR 30129; June 14, 1996). Appendix E to Part 50, Paragraph IV.F.2, currently provides that the "offsite plans for each *site* shall be exercised biennially" (emphasis added) with the full or partial participation of each offsite authority having a role under the plans, and that "each licensee at each site" shall conduct an exercise of its onsite emergency plan every 2 years, an exercise that may be

included in the full or partial participation biennial exercise[1]. Thus, Paragraph IV.F.2 is ambiguous about the emergency preparedness exercise requirements where multiple nuclear power plants, each licensed to different licensees, are co-located at the same site. Specifically, it is ambiguous regarding whether each licensee must participate in a full or partial participation exercise of the offsite plan every 2 years, or whether the licensees may alternate their participation such that a full or partial participation exercise is held every 2 years and each licensee (at a two-licensee site) participates in a full or partial participation exercise every 4 years.

Upon consideration of the language of the current regulation and the legislative history of the exercise requirements, the Commission believes that the ambiguity in the current regulation shall be interpreted such that each nuclear power plant licensee, co-located on the same site, must participate in a full or partial participation offsite exercise every 2 years (and that each offsite authority is to participate on either a full or partial participation basis in each licensee's biennial offsite exercise). However, upon consideration of the matter, the Commission believes that requiring each licensee on a co-located site to participate in a full or partial participation exercise every 2 years, and for the offsite authorities to participate in each

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[1] 10 CFR Part 50, Appendix E, IV.F.2, states:

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.

a. ***

b. Each licensee at each site shall conduct an exercise of its onsite emergency plan every 2 years. The exercise may be included in the full participation biennial exercise required by paragraph 2.c. of this section.***

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 2 years and shall, at least, partially participate in other offsite plan exercises in this period. "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."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.

licensee's full or partial participation exercise, is not necessary to provide reasonable assurance that each licensee and the offsite authorities will be able to fulfill their responsibilities under the emergency plan should the plan be required to be implemented. Furthermore, the Commission believes that such an interpretation could impose an undue regulatory burden on offsite authorities. Currently, there is only one nuclear power plant site with power plants licensed to two separate licensees: the James A. FitzPatrick and Nine Mile Point site. Although the ambiguity in Paragraph IV.F.2 has limited impact today, the Commission understands that future nuclear power plant licensing concepts currently being considered by the industry include siting multiple nuclear power plants on either a single site or adjacent, contiguous sites. These plants may be owned and/or operated by different licensees. Therefore, the Commission believes that this final rulemaking is necessary to remove the ambiguity in Paragraph IV.F.2 and clearly specify the emergency preparedness exercise requirements for co-located licensees.

The Commission finds that where two nuclear power plants are licensed to different licensees and meet the definition of being co-located, reasonable assurance of emergency preparedness exists where:

1. The co-located licensees would exercise their onsite plans biennially;
2. The offsite authorities would exercise their plans biennially; and,
3. The interface between offsite plans and the respective onsite plans would be exercised biennially in a full or partial participation exercise alternating between each licensee.

Thus, each co-located licensee would participate in a full or partial participation exercise quadrennially. In addition, when one of the co-located licensees is participating in a full or partial participation exercise, the final rule requires any other co-located licensees to participate in activities and interaction (A&I) with offsite authorities. For the period between exercises, the

final rule also requires the licensees to conduct emergency preparedness A&I. The purpose of these A&I would be to test and maintain interface among the affected state and local authorities and the licensees.

The Commission concludes that biennial full or partial participation exercises for each co-located licensee are not warranted and that this final regulation provides a sufficient level of assurance of emergency preparedness for the following reasons. First, the final rule is consistent with the current licensees' practice for the James A. FitzPatrick/Nine Mile Point plants. This practice has been reviewed periodically by the NRC, the Federal Emergency Management Agency (FEMA), and the State of New York. NRC has continued to find that there is reasonable assurance that appropriate measures could be taken to protect the public health and safety in the event of a radiological emergency based on NRC's assessment of the adequacy of the licensees' onsite Emergency Plannings (EP) programs, FEMA's assessment of the adequacy of the offsite EP programs, and the current level of interaction between the onsite and offsite emergency response organizations in the period between full or partial participation exercises.

Second, the central requirement of a "partial participation" exercise under the current regulations is to test the "direction and control functions" between the licensee and the offsite authorities (i.e., protective action decision making related to emergency action levels and communications capabilities among affected State and local authorities and the licensee). The final rule contains a requirement that, in each of the 3 years between a licensee's participation in a full or partial participation exercise, each licensee shall participate in A&I with offsite authorities to test and maintain interface. By requiring that the licensee's emergency preparedness organization engage in activities and interactions with offsite authorities to exercise and test effective communication and coordination, the final rule provides the

functional equivalent of a biennial exercise which tests the “direction and control functions” between the licensee and the offsite authorities. *Id*.

Third, the burden of requiring each licensee to participate biennially in a full or partial participation exercise with offsite participation falls most heavily on the offsite authorities (i.e., the state and local authorities). The Commission’s 1984 and 1996 rulemakings were specifically intended to reduce the schedule for offsite exercises to remove unnecessary burden on offsite authorities. However, the Commission did not explicitly address the unique circumstance of two plants located on a single site, with each plant owned by a different licensee. This final rulemaking addresses the undue burden placed upon offsite authorities in these circumstances.

The final rule defines co-located licensees as two different licensees whose licensed facilities are located either on the same site or on adjacent, contiguous sites, and that share most of the following emergency planning and siting elements:

1. Plume exposure and ingestion emergency planning zones;
2. Offsite governmental authorities;
3. Offsite emergency response organizations;
4. Public notification system; and/or
5. Emergency facilities.

Paragraph-By-Paragraph Discussion of Changes to 10 CFR Part 50, Appendix E.

A. Paragraph IV. B - Assessment Actions.

This paragraph is amended by adding new language governing the type and scope of EAL changes that must receive NRC approval before implementation. The final amendment clarifies that the Commission approval of EAL changes is required for changes that decrease

the effectiveness of the emergency plan when a licensee proposes an alternate method for complying with the regulations, when converting from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007 or NEI-99-01-based). The final language also clarifies the existing requirement that applicants for initial reactor operating licenses and initial COLs must obtain Commission approval of initial EALs.

B. Paragraph IV.F.2. - Training.

This paragraph is amended to articulate the emergency planning exercise requirements for co-located licensees. Under the final amendment, co-located licensees are required to exercise their onsite plans biennially. The offsite authorities will exercise their plans biennially. The interface between offsite plans and the respective onsite plans will be exercised biennially in a full or partial participation exercise alternating between each licensee. Thus, each co-located licensee will participate in a full or partial participation exercise quadrennially. In addition, when one of the co-located licensees is participating in a full or partial participation exercise, the final rule requires any other co-located licensees to participate in A&I with offsite authorities. For the period between exercises, the final rule also requires the licensees to conduct emergency preparedness A&I. The purpose of A&I is to test and maintain interface among the affected State and local authorities and the licensee. Table 1 provides a graphical description of one possible way of meeting the requirements of the final rule.

Table 1 **Example of Emergency Preparedness Training for Two (2) Co-Located Licensees**

Year	1	2	3	4	5	6	7	8	9
Licensee 1	X	A&I	A&I	A&I	X	A&I	A&I	A&I	X

Licensee 2	A&I	A&I	X	A&I	A&I	A&I	X	A&I	A&I

Notes: X = Full or partial participation exercise (with appropriate activities and interactions with offsite authorities).

A&I = Activities and interactions with offsite authorities

A new footnote 6 is also added to provide a definition of co-located licensees. There are two elements to the definition, both of which must be satisfied. First, co-located licensees are two different licensees whose licensed facilities are located either on the same site, or on adjacent, contiguous sites. Secondly, the co-located licensees must share most of the following emergency planning and siting elements.

1. Plume exposure and ingestion emergency planning zones;
2. Offsite governmental authorities;
3. Offsite emergency response organizations;
4. Public notification system; and/or
5. Emergency facilities.

The proposed rule did not actually specify that co-located licensees are those whose facilities either share the same site, or be located on adjacent contiguous sites, this is inherent in the concept of being “co-located.” Nonetheless, the Commission believes that the rule should explicitly address this, and the final rule’s language has been modified to include the concept of physical co-location as one of the criteria for a “co-located” licensee.

Comments on the Proposed Rule.

On July 24, 2003 (68 FR 43673), the Commission published a notice of proposed rulemaking and requested public comments by October 7, 2003. A total of seven comment

letters were received. One comment letter was from a member of the public, six from utilities. All of the utility letters were in favor of the proposed changes, while the public commenter suggested that the changes were unnecessary. However, the comment letters did provide suggested clarifications to the proposed amendments. A detailed evaluation of each comment received is outlined below.

Comment

In Paragraph IV.B (Assessment Actions), in lieu of adding “or licensee” in the third sentence, one commenter proposed that the following be added after the fourth sentence, “A revision to an EAL must be discussed and agreed on by the licensee and state and local government authorities prior to implementation.”

Response

The Commission disagrees with this comment because the Commission wants the original EAL submittals from applicants and licensees to be discussed and agreed on with the state and local governments and approved by the Commission. Additionally, the Commission continues to want EALs to be reviewed by the state and local governments annually and not only when revisions are made to the EALs.

Comment

“Reference is made throughout the proposed rule to NUMARC/NESP-007 as an alternative EAL scheme. Since the proposed rule was issued for public comment, NRC has endorsed NEI-99-01 as another acceptable EAL scheme. It is proposed that NEI-99-01 be referenced in addition to or in lieu of NUMARC/NESP-007.”

Response

The Commission agrees with this comment and has referenced NEI-99-01 throughout the final amendment accordingly.

Comment

"The sixth and seventh sentences in the proposed Appendix E, Paragraph IV.B appear redundant to § 50.54(q), with regard to emergency plan revisions, and Appendix E Paragraph V, with regard to implementing procedure revisions. Furthermore, these additions might necessitate a complementary change to § 50.4(b)(5) which explicitly references submittals pursuant to § 50.54(q) and Appendix E Paragraph V. It is proposed that these two sentences be excluded from the final rule."

Response

The Commission disagrees with this comment in that sentences six and seven are consistent with § 50.54(q) and 50.4 regarding sending information to the Commission. Therefore, these sentences do not necessitate a complementary change to § 50.4, nor should they be deleted from the final regulation.

Comment

"There is a possible ambiguity in Table 1 - Example of Emergency Preparedness Training for Two (2) Co-Located Licensees. The table, as well as the text of the proposed changes, does not indicate that in those years when a licensee participates in a full-participation exercise, that licensee also participates in A&I with offsite response organizations. The result of this ambiguity could be an interpretation that only the non-participating licensee has any responsibility for A&I during an exercise year. The wording of the text and the table should be clarified."

Response

The Commission agrees and has modified Table 1 accordingly.

Comment

"The list of A&I in the proposed rule contains requirements that may not apply to sites other than the James A. FitzPatrick and Nine Mile Point sites, currently the only site with two

power plants licensed to two separate licensees. For instance, the last recommended interaction is "Licensee provides use of weapons firing range to local and state law enforcement (Sheriff, State Police)." While this interaction may have been negotiated as part of a support agreement for offsite response agencies at one site, it may not be appropriate at other sites."

Response

The Commission agrees and has modified the list of A&I that are now contained in Regulatory Guide 1.101, Rev 5.

Comment

The language in § 50.54(q) could be further improved by establishing clear criteria for what constitutes a decrease in effectiveness of the Emergency Plan. Specifically, the following language should be revised, "*may make changes to these plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of paragraph 50.47(b) and the requirements of Appendix E to this part.*"

The commenter suggested to add the words "a change to an emergency plan will not decrease the effectiveness of the plan if the change will not decrease the abilities of the emergency response organization, and/or supporting emergency response facilities and equipment, as required by paragraphs 10 CFR 50.47(b) and Appendix E, or equivalent measures approved under 10 CFR 50.47(c), to reasonably assure the adequate protection of public health and safety in the event of a radiological emergency as stated in 10 CFR 50.47(a)(1). The change cannot delete any of the capabilities described in 10 CFR 50.47(b) and (d), or in Appendix E to 10 CFR Part 50."

Response

While the Commission recognizes the merits of this comment, revising 10 CFR 50.54(q) to define what is meant by “decreasing the effectiveness” of the emergency plans was not published as part of the proposed rule and is therefore beyond the scope of this rulemaking.

Comment

One commenter believes that clarifying exercise requirements to allow alternating participation in exercises for co-located licensees will remove ambiguity that currently exists. The proposed exercise frequency, coupled with the detailed activities and interactions, will continue to provide a sufficient level of assurance of offsite emergency preparedness. Also, it will provide clear guidance for future licensing actions and avoid undue burden on offsite response organizations. Section B. [69FR43675 - 43676] is very specific in its wording as to what is the responsibility of the licensee. In this regard the rule should not be specific but refer to the commitments defined in the respective emergency response plans. The commenter believes the licensee, state, and local emergency response organizations should have the latitude to determine the appropriate training and implementation responsibilities.

Response

The Commission agrees and has removed the list of A&I from this rulemaking but has placed that list of A&I into Regulatory Guide 1.101, Rev. 5.

Comment

One commenter believes the proposed amendment to Appendix E, paragraph IV.B is unnecessary. The commenter states that the conclusion that the current regulations are unclear and can be interpreted to require prior NRC approval for all changes to a licensee’s EAL requires a torturous reading of the current language.

Response

The Commission disagrees with this comment. The Commission believes that the regulations are ambiguous enough to be read to require NRC approval for all EAL changes. Consequently, the amendment to Appendix E, paragraph IV.B is necessary to clarify that NRC approval of all EAL changes is not necessary to ensure an adequate level of safety.

METRIC POLICY

On October 7, 1992, the Commission published its final Policy Statement on Metrication. According to that policy, after January 7,1993, all new regulations and major amendments to existing regulations were to be presented in dual units. These final amendments to the regulations contain no units.

VOLUNTARY CONSENSUS STANDARDS

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless using such a standard is inconsistent with applicable law or is otherwise impractical. This final rulemaking addresses two matters:

(1) The circumstances under which a licensee may modify an existing EAL without prior NRC review and approval; and

(2) The nature and scheduling of emergency preparedness exercises for two different licensees of nuclear power plants which are co-located on the same site (co-located licensees). These are not matters which are appropriate for addressing in industry consensus standards, and have not been the subject of these standards. Accordingly, this final rulemaking is not within the purview of

the National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113.

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

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 the final amendments are not major Federal actions significantly affecting the quality of human environment, and therefore, an environmental impact statement is not required. The basis for this determination reads as follows:

Need for the Action

1. NRC Review of Changes to Emergency Action Levels.

10 CFR 50.54(q) states that licensees may make changes to their emergency plans without Commission approval only if the changes "do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E" to 10 CFR Part 50. By contrast, Appendix E states that "emergency action levels shall be...approved by NRC." The industry practice, in general, has been to revise EALs in ways that do not reduce the effectiveness of the emergency plan and to implement the changes in accordance with § 50.54(q) without requesting NRC approval. The Commission believes that the current regulations are unclear and can be interpreted to require prior NRC approval for all licensee EAL changes. The Commission has determined that NRC approval of all EAL changes is not necessary to ensure an adequate level of safety. Thus, the current regulation imposes an unnecessary burden on licensees and the NRC.

2. Exercise Requirements for Co-Located licensees (paragraph IV.F.2.).

10 CFR Part 50, Appendix E, requires that the offsite emergency plans for each site shall be exercised biennially with the full or partial participation of each offsite authority having a role under the plans and that each licensee at each site shall conduct an exercise of its onsite emergency plan every 2 years, an exercise that may be included in the full participation biennial exercise. Paragraph IV.F.2 is ambiguous about the emergency preparedness exercise requirements where two nuclear power plants, each licensed to a different licensee, and meet the definition of being co-located. Specifically, it is ambiguous regarding whether each licensee must participate in a full-participation exercise of the offsite plan every 2 years, or whether the licensees may alternate their participation, so that a full participation exercise is held every 2 years and each licensee (at a two-licensee site) participates in a full participation exercise every 4 years.

Upon consideration of the language of the current regulation and the legislative history of the exercise requirements, the Commission believes that the ambiguity in the current regulations can be interpreted that each nuclear power plant licensee co-located on either the same site, or two or more adjacent, contiguous sites, must participate in a full participation offsite exercise every 2 years (and that each offsite authority is to participate on either a full or partial participation basis in the licensee's biennial offsite exercise).

However, the Commission believes that requiring each co-located licensee to participate in a full participation exercise every 2 years, and for the offsite authorities to participate in each licensee's full participation exercise, is not necessary to provide reasonable assurance that each licensee and the offsite authorities will be able to fulfill their responsibilities under the emergency plan should the plan be required to be implemented. Furthermore, the Commission believes that this interpretation could impose an undue regulatory burden on offsite authorities.

Therefore, the Commission believes that rulemaking is necessary to make clear that each co-located licensee need not participate in a full participation offsite exercise every 2 years.

The Commission finds that where two nuclear power plants are licensed to different licensees and meet the definition of being co-located, reasonable assurance of emergency preparedness exists where:

(1) The co-located licensees would exercise their onsite plans biennially;

(2) The offsite authorities would exercise their plans biennially; and,

(3) The interface between offsite plans and the respective onsite plans would be exercised biennially in a full or partial participation exercise alternating between each licensee.

Thus, each co-located licensee would participate in a full or partial participation exercise quadrennially. In addition, when one of the co-located licensees is participating in a full or partial participation exercise, the final rule requires the other co-located licensee to participate in A&I with offsite authorities. For the period between exercises, the final rule also requires the licensees to conduct emergency preparedness activities and interactions. The purpose of A&I would be to test and maintain interface among the affected state and local authorities and the licensees.

Environmental Impact of the Final Actions

The NRC believes that the environmental impact for the final rule is negligible. The final rule does not require any changes to the design or the structures, systems and components of any nuclear power plant. The final rule would not require any changes to licensee programs and procedures for actual operation of nuclear power plants. Thus, there would be no change in radiation dose to any member of the public which may be attributed to the final rule, nor will there be any changes in occupational exposures to workers. Furthermore, the final rule will not

result in any changes that would increase or change the nature of nonradiological effluents from nuclear power plants.

Alternative to the Final Actions

The alternative to the final action is to not revise the regulations (i.e., the no action alternative). No environmental impacts are associated with the no action alternative.

Agencies and Persons Consulted

Cognizant personnel from the Federal Emergency Management Agency and New York State (for the co-located licensee part of the rule change), were consulted as part of this rulemaking activity.

PAPERWORK REDUCTION ACT STATEMENT

This final rule increases the burden on co-located licensees to log activities and interactions with offsite agencies during the years that full or partial participation emergency preparedness exercises are not conducted and to prepare a one-time change to procedures to reflect the revised exercise requirements. The public burden for this information is estimated to average 30 hours per co-located licensee per year. Because the burden for this information collection is insignificant, OMB clearance is not required. Existing requirements were approved by the OMB, approval number 3150-0011.

PUBLIC PROTECTION NOTIFICATION

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

REGULATORY ANALYSIS

The NRC has prepared a regulatory analysis on this regulations. This analysis examines the costs and benefits of the alternatives considered by the Commission.

I. Statement of Problem and Objectives

The Commission is making two changes to its emergency preparedness regulations contained in 10 CFR Part 50, Appendix E. The first amendment relates to the NRC approval of licensee changes to EALs, paragraph IV.B and the second amendment relates to exercise requirements for co-located licensees, paragraph IV.F.2. A discussion of each of these final amendments follows.

(1) NRC approval of licensee changes to EALs, 10 CFR Part 50, Appendix E, Paragraph IV.B.

EALs are part of a licensee's emergency plan. There is an inconsistency in the emergency planning regulations regarding the threshold for when NRC approval of nuclear power plant licensee changes to emergency action levels is required. Section 50.54(q) states that licensees may make changes to their emergency plans without Commission approval only if the changes "do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E" to 10 CFR Part 50. By contrast, Appendix E states that "emergency action levels shall be...approved by NRC." Current industry practice has been to make revisions to EALs and to implement them without requesting NRC approval, after determining that the changes do not reduce the effectiveness of the emergency plan in accordance with §50.54(q). When the determination is made that a final change constitutes a decrease in effectiveness, licensees submit the changes to the Commission for approval. If a change involves a major change to the EAL scheme, for example, changing from an EAL scheme based on NUREG-0654

guidance to an EAL scheme based on NUMARC/NESP-007 or NEI-99-01 guidance, or when proposing an alternate method for complying with the regulations, it has been the industry practice to seek NRC review and approval before implementing the change.

(2) Exercise Requirements for Co-Located Licensees, 10 CFR Part 50, Appendix E, Paragraph IV.F.

The emergency planning regulations were significantly upgraded in 1980 after the accident at Three Mile Island (45 FR 55402; August 19, 1980). The updated 1980 regulations required an annual exercise of the onsite and offsite emergency plans. The regulations were amended in 1984 to change the frequency of participation of state and local governmental authorities in nuclear power plant offsite exercises from annual to biennial (49 FR 27733; July 6, 1984). The regulations were amended in 1996 to change the frequency of exercising the licensees' onsite emergency plans from annual to biennial (61 FR 30129; June 14, 1996). Appendix E, to 10 CFR Part 50, Paragraph IV.F.2, currently provides that the "offsite plans for each site shall be exercised biennially" with the full or partial participation of each offsite authority having a role under the plans, and that "each licensee at each site" shall conduct an exercise of its onsite emergency plan every 2 years, an exercise that may be included in the full participation biennial exercise. Thus, Paragraph IV.F.2 is ambiguous about the emergency preparedness exercise requirements where two nuclear power plants, each licensed to a different licensee, and meet the definition of being co-located. Specifically, it is ambiguous regarding whether each licensee must participate in a full participation exercise of the offsite plan every 2 years, or whether the licensees may alternate their participation so that a full participation exercise is held every 2 years and each licensee (at a two-licensee site) participates in a full participation exercise every 4 years.

Upon consideration of the language of the current regulation and the legislative history of the exercise requirements, the Commission believes that the ambiguity in the current

regulations can be interpreted that each co-located nuclear power plant licensee must participate in a full participation offsite exercise every 2 years (and that each offsite authority is to participate on either a full or partial participation basis in each licensee's biennial offsite exercise). However, upon consideration of the matter, the Commission believes that requiring each co-located licensee to participate in a full participation exercise every 2 years, and for the offsite authorities to participate in each licensee's full participation exercise, is not necessary to provide reasonable assurance that each licensee and the offsite authorities will be able to fulfill their responsibilities under the emergency plan should the plan be required to be implemented. Furthermore, the Commission believes that this interpretation could impose an undue regulatory burden on offsite authorities. Currently, there is only one nuclear power plant site with two power plants licensed to two separate licensees: the James A. FitzPatrick and Nine Mile Point site. Although the ambiguity in Paragraph IV.F.2 has limited impact today, the Commission understands that future nuclear power plant licensing concepts currently being considered by the industry include siting multiple nuclear power plants on either a single site or adjacent, contiguous sites. These plants may be owned and/or operated by different licensees. Therefore, the Commission believes that this rulemaking is necessary to remove the ambiguity in Paragraph IV.F.2 and clearly specify the emergency preparedness exercise obligations of co-located licensees.

The Commission has determined that where two nuclear power plants are licensed to different licensees and meet the definition of being co-located, reasonable assurance of emergency preparedness exists where:

(1) The co-located licensees would exercise their onsite plans biennially;

(2) The offsite authorities would exercise their plans biennially; and

(3) The interface between offsite plans and the respective onsite plans would be exercised biennially in a full or partial participation exercise alternating between each licensee.

Thus, each co-located licensee would participate in a full or partial participation exercise quadrennially. In addition, in the year when one of the co-located licensees is participating in a full or partial participation exercise, the final rule requires the other co-located licensee to participate in A&I with offsite authorities. For the period between exercises, the final rule also requires the licensees to conduct emergency preparedness activities and interactions. The purpose of A&I would be to test and maintain interface among the affected state and local authorities and the licensees.

The final rule defines co-located licensees as two different licensees whose licensed facilities are located either on the same site or on adjacent, contiguous sites, and that share most of the following emergency planning and siting elements.

1. Plume exposure and ingestion emergency planning zones;
2. Offsite governmental authorities;
3. Offsite emergency response organizations,

d. Public notification system; and/or

e. Emergency facilities.

II. Background

(1) Emergency Action Levels (paragraph IV.B).

EALs are thresholds of plant parameters (such as containment pressure and radiation levels) used to classify events at nuclear power plants into one of four emergency classes (Notification of Unusual Event, Alert, Site Area Emergency, or General Emergency). EALs are required by Appendix E to 10 CFR Part 50 and § 50.47(b)(4), and are contained in licensees' emergency plans and emergency plan implementing procedures.

Section 50.54(q) states that licensees can make changes to their emergency plans without Commission approval only if the changes “do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of §50.47(b) and the requirements of Appendix E” to 10 CFR Part 50. However, Appendix E to 10 CFR Part 50 states that, “These emergency action levels shall be discussed and agreed on by the applicant and state and local governmental authorities and approved by NRC.” Because EALs are required to be included in the emergency plan, the issue is whether changes to EALs incorporated into the emergency plan are subject to the change requirements in 10 CFR 50.54(q), or to the more restrictive requirement in Appendix E to 10 CFR Part 50.

(2) Exercise Requirements for Co-Located Licensees (paragraph IV.F.2).

The NRC’s current regulations contained in Appendix E to 10 CFR Part 50, require that the offsite emergency plans for each site shall be exercised biennially with the full or partial participation of each offsite authority having a role under the plans and that each licensee at each site shall conduct an exercise of its onsite emergency plan every 2 years, an exercise that may be included in the full participation biennial exercise. This exercise requirement, though straightforward, has implementation and compliance problems when two or more licensees’ facilities are located either on the same site or on adjacent, contiguous sites, thereby requiring the same state to conduct a full participation exercise with each co-located licensee every year.

There is currently only one site with two licensees, the Nine Mile Point and James A. FitzPatrick site. However, the nuclear industry has expressed the possibility of locating new plants on currently approved sites, possibly with different licensees, thus the need for this final rule change.

III. Rulemaking Options For Both Amendments

Option 1 - revise the regulations to reflect current staff and licensee practices.

Option 2 - not to revise the regulations.

IV. Alternatives

Impact(s)

Option 1 for the EAL revisions would amend the existing regulations to eliminate the inconsistency between the requirements of 10 CFR Part 50, Appendix E and § 50.54(q) relating to approval of changes to EALs and reflect current staff and licensee practice. This would be done by amending Appendix E to 10 CFR Part 50 to require NRC to approve new EAL schemes, as well as proposals of alternate methods for complying with the regulations, and requiring Commission approval of revisions to EALs that reduce the effectiveness of the emergency plans in accordance with § 50.54(q). The rulemaking would provide a means for licensees to make changes to their EALs while reducing unnecessary regulatory burden.

Once the rule is revised, licensees could make EAL changes that do not decrease the effectiveness of the emergency plan without a submittal for prior approval from the Commission. This approach would reduce the unnecessary regulatory burden on licensees.

Option 2 for EAL changes would retain the inconsistency in the regulations, thereby increasing the unnecessary burden on licensees and the NRC staff in addressing questions on a case-by-case basis.

Option 1 (to amend the regulation) for co-located licensees would maintain safety because emergency planning exercises would continue to be required at the frequency which has provided reasonable assurance that the emergency plans can be implemented. The impact of Option 1 on the resources of licensees and offsite authorities would be minimal. Option 1 would reflect what licensees are currently doing and, therefore, there would not be a

change in existing acceptable practices. Clarification of the regulatory requirements would modify wording that has resulted in an ambiguous understanding of the requirements. This option would require NRC resources to conduct the rulemaking. The activities and interactions that would test and maintain the interface for co-located licensees and offsite authorities in the period between exercises will provide a consistent expectation and basis for these activities. The level of A&I adequate to maintain an appropriate level of preparedness would be ensured.

The impact of the no rulemaking option (option 2) for the co-located licensee exercise revision on the resources of staff, licensees and offsite authorities would be minimal. However, without clarification of the regulatory requirements, there would be the continued ambiguity in the requirements for future co-located licensee situations. The impact of these continued ambiguities is that potential confusion over requirements would have to be resolved on a case-by-case basis by the staff. This option would not require NRC resources for conducting a rulemaking.

V. Estimation and Evaluation of Values and Impacts

The final amendments modify current requirements in the NRC's approval of changes to EALs and the participation in emergency preparedness exercises for co-located licensees. The change in the requirement for NRC approval of EALs is being made for consistency, and because it reflects current practice. It reflects the Commission's original intent and does not impose a burden on licensees. However, the second change does modify the information collection requirements and impacts the burden on future co-located licensees. Current co-located licensees have implemented an emergency planning training regime consistent with the final rule.

The final amendment requires that future co-located licensees exercise their onsite plans biennially. The offsite authorities would exercise their plans biennially. The interface

between offsite plans and the respective onsite plans would be exercised biennially in a full or partial participation exercise alternating between each licensee. Thus, each co-located licensee will participate in a full or partial participation exercise quadrennially. In addition, in the year when one of the co-located licensees is participating in a full or partial participation exercise, the final rule requires any other co-located licensees to participate in activities and interactions with offsite authorities. For the period between exercises, the final rule requires each licensee to conduct emergency preparedness activities and interactions. Likewise each co-located licensee would log the activities and interactions with offsite authorities that are also conducted in the period between exercises. This final rule does not increase the burden on current co-located licensees because they have an emergency planning training regime consistent with the final rule. Future co-located licensees would keep a log of the A&I with offsite authorities which is estimated to average 30 hours per co-located licensee per year.

VI. Presentation of Results

As noted, the impact on a co-located licensee to implement the final rule change is 30 hours per year per co-located licensee. This time would be used to maintain a log of the A&I with offsite authorities. At an assumed average hourly rate of $156/hour, the total industry implementation cost is estimated at $9,360. The cost for an individual co-located licensee is $4,680 per year.

With respect to the EAL rule change, licensees would save staff time by having explicit NRC requirements and guidance that will assist the licensees in the proper submittals of EAL changes. The impact of improved regulations on the NRC is a decrease in the amount of staff time needed to review licensee EAL changes. This is estimated to be about a 100 staff-hour reduction or a $8,000 savings to the NRC per year (assuming a $80 hourly rate for NRC staff

time). However, it is uncertain as to how many EAL changes might have been received by the NRC.

There would be several additional benefits associated with these amendments. The greatest would be the increased assurance that the Commission's regulations are consistent and not ambiguous. Further, by addressing these issues generically through rulemaking rather than continuing the current case-by-case approach, it is expected that the burden on the NRC staff would be reduced by several hours for each licensee EAL change as well as future co-located licensees' exercise requirements that NRC would need to approve. Another beneficial attribute to this final action is regulatory efficiency resulting from the expeditious handling of future licensing actions by providing regulatory predictability and stability for the EAL changes as well as the exercise requirements for co-located licensees.

VII. Decision Rationale for Selection of the Final Action

As previously discussed, the additional burdens on a licensee and the NRC are expected to be modest. However, a revision of the requirements is desirable to remove ambiguities in the current regulations while maintaining safety and reducing unnecessary regulatory burden.

VIII. Implementation

The final rule takes effect 90 days after publication in the *Federal Register*.

REGULATORY FLEXIBILITY CERTIFICATION

In accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that the final rule will not have a significant economic impact on a substantial number of small entities. The final rule would affect only States and licensees of nuclear power plants. These States and licensees do not fall within the scope of the definition

of “small entities” set forth in the Regulatory Flexibility Act, or the size standards established by the NRC (10 CFR 2.810).

BACKFIT ANALYSIS

(1) NRC approval of EAL Changes

The final rule, which eliminates the need for NRC approval for certain EAL changes, does not constitute a backfit as defined in §50.109(a)(1). Although 10 CFR 50.54(q) permits licensees to make changes to their emergency plans which do not decrease the effectiveness of the plans, 10 CFR Part 50, Appendix E currently requires that all EALs shall be approved by NRC. The final rule clarifies the 10 CFR Part 50, Appendix E requirement to permit licensee changes to EALs without NRC approval if the changes do not decrease the effectiveness of the emergency plan. The final rule requires NRC approval for those EAL changes which decrease the effectiveness of the emergency plan, NRC approval when a licensee proposes to change from one EAL scheme to another as well as proposals of an alternate method for complying with the regulations. The final rule clarifies the requirements and represents the current practice of making changes under §50.54 (q) requirements and is therefore not a backfit

In addition, the final rule applies prospectively to changes initiated by licensees. The Commission has indicated in various rulemakings that the Backfit Rule does not protect the prospects of a potential applicant nor does the Backfit Rule apply when a licensee seeks a change in the terms and conditions of its license. A licensee-initiated change to an EAL does not fall within the scope of actions protected by the Backfit Rule and, therefore, the Backfit Rule does not apply to this final rulemaking.

(2) Co-Located Licensee.

The amendment that addresses the regulatory ambiguity regarding exercise participation requirements for co-located licensees applies to the existing co-located licensees

for the Nine Mile Point and James A. FitzPatrick site and prospectively to future co-located licensees.

With respect to the Nine Mile Point and James A. FitzPatrick licensees, the final rule would arguably constitute a backfit, inasmuch as there is some correspondence between the licensees and the NRC which may be interpreted as constituting NRC approval of “alternating participation” by each licensee in a full or partial participation exercise every 2 years. The backfit may not fall within the scope of the compliance exception, 10 CFR 50.109(a)(4)(i), in view of the lack of new information showing that the prior NRC approval of “alternating participation” was based upon a factual error or new information not known to the NRC at the time that the NRC approved “alternating participation.” However, these licensees have informally been implementing an emergency planning training regime since year 2000 that is consistent with the final rule. Accordingly, the NRC will not prepare a backfit analysis addressing the Nine Mile Point and James A. FitzPatrick licensees.

With respect to future holders of operating licenses (including combined licenses under Part 52) for nuclear power plants which meet the definition of being co-located, the Commission has indicated in various rulemakings that the Backfit Rule does not protect the prospects of a potential applicant.

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of Office of Management and Budget (OMB).

LIST OF SUBJECTS IN 10 CFR PART 50

Antitrust, Classified information, Criminal penalties, Fire protection, 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, the National Environmental Policy Act of 1969, as amended, and 5 U.S.C. 552 and 553, the NRC is adopting the following amendment to 10 CFR Part 50.

PART 50–DOMESTIC LICENSING OF PRODUCTION AND UTILIZATIONS 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. 444, 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), sec. 1704, 112 Stat. 2750 (44 U.S.C 3504 note).

Section 50.7 also issued under Pub. L 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5841). Section 50.10 also issued under secs. 101, 185, 68 Stat. 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.43 (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. L. 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. In Appendix E to Part 50, Paragraphs IV. B and F.2.c are revised, footnote 5 is revised, footnotes 6 through 10 are redesignated as 7 through 11 respectively, and a new footnote 6 is added to paragraph IV.F.2.c. 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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B. Assessment Actions.

The means to be used for determining the magnitude of, and for continually assessing the impact of, the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of local and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within and outside the site boundary to protect health and safety. The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring. These initial emergency action levels shall be discussed and agreed on by the applicant or licensee and state and local governmental authorities, and approved by the NRC. Thereafter, emergency action levels shall be reviewed with the State and local governmental authorities on an annual basis. A revision to an emergency action level must be approved by the NRC before implementation if:

(1) the licensee is changing from one emergency action level scheme to another emergency action level scheme (e.g., a change from an emergency action level scheme based on NUREG-0654 to a scheme based upon NUMARC/NESP-007 or NEI-99-01);

(2) the licensee is proposing an alternate method for complying with the regulations; or

(3) the emergency action level revision decreases the effectiveness of the emergency plan.

A licensee shall submit each request for NRC approval of the proposed emergency action level change as specified in § 50.4. If a licensee makes a change to an EAL that does not require NRC approval, the licensee shall submit, as specified in § 50.4, a report of each change made within 30 days after the change is made.

* * * * *

F. Training

2. * * *

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 2 years and shall, at least, partially participate[5] in other offsite plan exercises in this period.

If two different licensees whose licensed facilities are located either on the same site or on adjacent, contiguous sites, and that share most of the elements defining co-located licensees,[6] each licensee shall:

(1) conduct an exercise biennially of its onsite emergency plan; and

(2) participate quadrennially in an offsite biennial full or partial participation exercise; and

(3) conduct emergency preparedness activities and interactions in the years between its participation in the offsite full or partial participation exercise with offsite authorities, to test and maintain interface among the affected state and

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[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.

[6] Co-located licensees are two different licensees whose licensed facilities are located either on the same site or on adjacent, contiguous sites, and that share most of the following emergency planning and siting elements:

a. plume exposure and ingestion emergency planning zones,
b. offsite governmental authorities,
c. offsite emergency response organizations,
d. public notification system, and/or
e. emergency facilities

local authorities and the licensee. Co-located licensees shall also participate in emergency preparedness activities and interaction with offsite authorities for the period between exercises.

* * * * *

Dated at Rockville, Maryland, this 19th day of January, 2005.

For the Nuclear Regulatory Commission.

/RA/

Annette Vietti-Cook,
Secretary of the Commission.