



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

June 18, 2003

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-03-0067

TITLE: PROPOSED AMENDMENTS TO 10 CFR PART 50, APPENDIX E RELATING TO (1) NRC APPROVAL OF CHANGES TO EMERGENCY ACTION LEVELS (EAL) PARAGRAPH IV.B. AND (2) EXERCISE REQUIREMENTS FOR CO-LOCATED LICENSEES, PARAGRAPH IV.F.2

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of June 18, 2003.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in black ink, reading "Annette L. Vietti-Cook", is written over a horizontal line.

Annette L. Vietti-Cook  
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Diaz  
Commissioner Dicus  
Commissioner McGaffigan  
Commissioner Merrifield  
OGC  
EDO  
PDR

## VOTING SUMMARY - SECY-03-0067

### RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. DIAZ	X				X	5/14/03
COMR. DICUS	X				X	5/26/03
COMR. McGAFFIGAN	X				X	6/13/03
COMR. MERRIFIELD	X				X	6/6/03

### COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on June 18, 2003.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: CHAIRMAN DIAZ

SUBJECT: SECY-03-0067 - PROPOSED AMENDMENTS TO 10 CFR  
PART 50, APPENDIX E RELATING TO (1) NRC APPROVAL  
OF CHANGES TO EMERGENCY ACTION LEVELS (EAL)  
PARAGRAPH IV.B. AND (2) EXERCISE REQUIREMENTS  
FOR CO-LOCATED LICENSEES, PARAGRAPH IV.F.2.

Approved xx <sup>w/comments and edits</sup> Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

I believe the changes proposed by the staff are desirable to resolve ambiguities and clarify the requirements in these areas; however, I do not necessarily agree with the characterization in the SECY regarding the "best" interpretation of the existing requirements. I have provided comments on the Federal Register Notice. It is my expectation that Federal Register Notices be of high quality.

hil phioz  
SIGNATURE

May 14, 2003  
DATE

Entered on "STARS" Yes \_\_\_\_\_ No \_\_\_\_\_

FOR FURTHER INFORMATION CONTACT: Michael T. Jamgochian, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Telephone: (301) 415-3224. Internet: MTJ1@NRC.GOV.

**SUPPLEMENTARY INFORMATION:**

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

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

EALs are part of a licensee's emergency plan. There appears to be an inconsistency in the emergency planning regulations regarding the NRC approval of nuclear power plant licensee changes to emergency action levels (EALs). 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, continues 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 "EAL's shall be... approved by NRC." However, the current industry practice <sup>in general,</sup> 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 proposed change constitutes a decrease in effectiveness, licensees submit the changes to NRC for review and 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 guidance, it has been the industry practice to seek NRC approval before implementing the change. The NRC has been aware of the industry practice and has not objected to it. The Commission <sup>believes</sup> ~~recognizes~~ that while the current regulations are unclear, <sup>and can be</sup> ~~they are~~ best interpreted to require prior NRC approval for all changes to a licensee's EALs.

The Commission believes that NRC review and approval of every EAL change is not necessary to provide reasonable assurance that EALs will continue to provide an acceptable level of safety ~~and will not otherwise result in non-compliance with applicable Commission requirements on emergency preparedness.~~ Rather, <sup>the</sup> Commission's regulatory review should be focused on EAL changes that are of sufficient significance that a safety review by the NRC is appropriate before the licensee may implement the change. The Commission believes that EAL changes which have the potential to reduce the effectiveness of the emergency plan are of sufficient regulatory significance that prior NRC review and approval is warranted. This proposed standard is the same standard that the current regulations provide for 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, and ~~there is no~~ <sup>should</sup> technical reason why this standard could not also be used for EAL changes. Based upon the NRC's inspections of emergency plans, including EAL changes ~~for which no NRC review and approval was sought, as well as EAL changes for which prior NRC review and approval was sought,~~ <sup>in general, to</sup> the Commission believes that licensees have been ~~and have the capability to continue~~ making appropriate determinations regarding whether an EAL change may potentially reduce the effectiveness of the emergency plan. <sup>and have the capability to continue to do so.</sup> Limiting the NRC's review and approval to EAL changes which may reduce the effectiveness of emergency plans will ensure adequate NRC oversight of licensee-initiated EAL changes, while both increasing regulatory effectiveness

(through use of a single consistent standard for evaluating all emergency plan changes) and reducing unnecessary regulatory burden on licensees (who would <sup>not</sup> no longer be required to submit for approval EAL changes that <sup>do not decrease the effectiveness of the emergency plan.</sup> have no regulatory significance).

One kind of EAL change which the Commission believes will always involve a potential reduction in effectiveness is where a licensee proposes to convert from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007-based). While the new EAL scheme may, upon review, be determined by the NRC to provide an acceptable level of safety and be in compliance with applicable NRC requirements, the potential safety significance of a change from one EAL scheme to another is such that prior NRC review and approval is appropriate to ensure that there is reasonable assurance that the proposed EAL change will provide an acceptable level of safety or otherwise result in non-compliance with applicable Commission requirements on emergency preparedness.

Accordingly, the Commission proposes to revise Appendix E to 10 CFR Part 50, to provide that NRC approval of EAL changes would be necessary for all EAL changes that decrease the effectiveness of the emergency plan and for licensees <sup>changing</sup> who are converting from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007-based). Licensees may make changes to EALs without NRC review and approval if the proposed EAL change ~~does not decrease the effectiveness of the emergency plan or constitute changing from one EAL scheme to another.~~

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

A. Rulemaking addressing exercise requirements for co-located licensees.

preparedness exercise requirements where multiple nuclear power plants, each licensed to different licensees, are co-located at the same site: whether *each licensee* must participate in a full-participation exercise of the off-site plan every two (2) years, or whether the licensees may alternate their participation such that a full-participation exercise is held every two (2) years and each licensee (at a two-licensee site) participates in a full-participation exercise every four (4) years.

Upon consideration of the language of the current regulation, and the legislative history of the exercise requirements, the Commission believes that <sup>the ambiguity in the current regulation can be</sup> ~~the better interpretation is~~ <sup>ed such</sup> that each nuclear power plant licensee co-located on the same site must participate in a full-participation offsite exercise every two years (and that each offsite authority is to participate on either a full or partial participation basis in each licensee's biennial offsite exercise). ~~Nonetheless,~~ <sup>upon</sup> consideration of the matter, the Commission believes that requiring each licensee on a co-located site to participate in a full-participation exercise every two years, and for the offsite authorities to participate in each licensee's full-participation exercise is not necessary ~~in all cases~~ 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 ~~would~~ <sup>could</sup> ~~arguably~~ 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

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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.

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 health and safety of the public in the event of a radiological emergency, based on NRC's assessment of the adequacy of the licensee's onsite Emergency Planning (EP) program, and FEMA's assessment of the adequacy of the offsite EP program, and on 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.*, (a) protective action decision making related to emergency action levels, and (b) communications capabilities among affected State and local authorities and the licensee. See 10 CFR Part 50, Appendix E, Paragraph IV.F, footnote 5. The proposed rule contains a requirement that, in each of the three years between a licensee's participation in a full participation exercise, each licensee shall participate in activities and interactions (A&I) with offsite authorities to test and maintain interface functions. By requiring that the licensee's emergency preparedness organization engages in activities with offsite authorities to exercise and test effective communication and coordination, the proposed rule provides the functional equivalent of ~~the current regulations requirements for~~ 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, in order to remove unnecessary burden on offsite authorities. However, the Commission <sup>did not</sup> failed to explicitly



address the unique circumstance of two plants located on a single site, with each plant owned by different licensees. This proposed rulemaking addresses the ~~apparent~~ undue burden placed upon offsite authorities in such circumstances.

The proposed rule defines co-located licensees as licensees that share <sup>many of</sup> 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 , 2nd/0r
- e. emergency facilities

The Commission requests public comments on whether the "alternating participation" concept should be extended to the situation where three (3) or more nuclear power plants are co-located at a single site. For example, if there were five nuclear power plants, each owned by separate licensees, were co-located on a single site, should the final rule include a provision which would require each licensee to participate in a full offsite exercise once every 10 years? If this is not considered appropriate, what alternative concept for the conduct of full-participation offsite exercises should the regulation specify?

The Commission also requests public comment on the elements of the definition of "co-located" licensees.

#### B. Proposed Guidance on Acceptable Emergency Planning Activities and Interactions for Co-Located Licensees

Currently, guidance on the conduct of training, including onsite and offsite exercises, is contained in Regulatory Guide (RG) 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors." The NRC intends to modify RG 1.101 to set forth guidance on the

9 with co-located licensees required to participate in activities and interaction with offsite authorities between exercises.

conduct of exercises, and activities and interactions, to reflect the provisions of any final rule addressing co-located licensees, as part of the final rulemaking package. The substance of the proposed guidance to be set forth in the revised version of RG 1.101 is set forth below. The Commission requests public comment on the following proposed guidance: <sup>for co-located licensees</sup>

1. *When one licensee hosts the two (2) year full or partial participation exercise, the other licensee is involved in the following activities:*
  - A. *Scenario preparation*
  - B. *Meetings with State, and local governmental personnel to develop extent of play document*
  - C. *Licensee to conduct training at Reception Centers, Congregate Care Centers, and County Emergency Operations Centers*
  - D. *Provide controllers and observers for the full participation exercise*
2. *Provide for the staffing of the State and County Emergency Operations Centers (EOC) with dose assessment and communications personnel as well as the staffing of the Joint News Center (JNC).*
3. *Hospital Drills are conducted twice a year with alternating counties if applicable.*
4. *The Notification Process and the Emergency Action Level Scheme shall be exercised.*
5. *Protective Action Recommendations (PAR) Methodology for the 10 and 50-mile Emergency Planning Zones (EPZs) and the Dose Assessment Methodology shall be exercised.*
6. *Licensee/Offsite training*
  - *Annual State County training (Examples: Reactor Systems, Dry Cask Storage, EALs)*
  - *Licensee provided Fire Service Training (County)*

- *Licensee provide radiological instrument calibration services to local government*
- *Licensee support of local government during annual Public Notification System (PNS) system test*
- *Licensee provides use of weapons firing range to local and state law enforcement (Sheriff, State Police)*

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

***Paragraph IV. B - Assessment Actions.***

This paragraph would be amended by adding new language in 10 CFR Part 50, Appendix E, Paragraph IV.B. governing the type and scope of EAL changes that must receive NRC approval prior to implementation. The proposed amendment clarifies that NRC approval of EAL changes would be required for changes that decrease the effectiveness of the emergency plan <sup>or changes to</sup> ~~and for licensees who are converting~~ from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007-based). NRC approval would *not* be necessary for EAL changes that do not decrease the effectiveness of the emergency plan or do not constitute a change from one EAL scheme to another. The proposed language also clarifies the existing requirement that applicants for initial reactor operating licenses and initial combined licenses (COL) must obtain NRC approval of initial proposed EALs.

Paragraph IV.B would also be amended by adding language analogous to the last sentence of 10 CFR 50.54(q), to clearly state that EAL changes which are made without NRC review and approval, as well as licensee requests for review and approval of EAL changes under the proposed language, must be submitted in accordance with the requirements of Section 50.4. The Commission proposes to follow the current practice of approving EAL changes without the use of a license amendment.

- 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

## ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The Commission is proposing to make two (2) amendments to its emergency preparedness regulations contained in 10 CFR Part 50, Appendix E. The first proposed revision relates to the NRC approval of changes to the Emergency Action Levels in 10 CFR Part 50, Appendix E, paragraph IV.B. The second proposed revision relates to exercise requirements for co-located licensees in Appendix E, paragraph IV.F.

### Need for the Action

#### (1) NRC Approval 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, continues 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 "EAL's shall be... approved by NRC." The industry practice, in general, has been to revise EALs that do not reduce the effectiveness of the emergency plan and to implement them in accordance with §50.54(q), without requesting NRC approval. The Commission <sup>believes</sup> ~~recognizes~~ that while the current regulations are unclear, <sup>and can be</sup> ~~they are~~ best interpreted to require prior NRC approval for all

licensee EAL changes. The Commission has determined that NRC approval of all EAL changes are 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 multiple nuclear power plants, each licensed to different licensees, are co-located at the same site: whether *each licensee* must participate in a full-participation exercise of the off-site plan every two (2) years, or whether the licensees may alternate their participation such that a full-participation exercise is held every two (2) years and each licensee (at a two-licensee site) participates in a full-participation exercise every four (4) years.

Upon consideration of the language of the current regulation and the legislative history of the exercise requirements, <sup>the ambiguity in the current regulations can be</sup> the Commission believes <sup>led such</sup> that the better interpretation is that each nuclear power plant licensee co-located on the same site must participate in a full-participation offsite exercise every two years (and that each offsite authority is to participate on either a full or partial participation basis in licensee's biennial offsite exercise). <sup>1</sup> Nonetheless, the Commission believes that requiring each licensee on a co-located site to participate in a full-participation exercise every two years, and for the offsite authorities to participate in each licensee's full-participation exercise is not necessary in all cases 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 <sup>could</sup> ~~would~~ arguably 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 two years.

The Commission proposes that where two nuclear power plants licensed to separate licensees are co-located on the same site, 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, (3) the interface between offsite plans and each of the 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 proposed rule requires the other co-located licensees to participate in activities and interaction with offsite authorities. For the period between exercises the proposed rule requires the licensees to conduct emergency preparedness activities and interactions. The purpose of A&I would be to test and maintain interface functions among the affected State and local authorities and the licensees.

#### **Environmental Impact of the Proposed Actions**

The NRC believes that the environmental impacts for each of the proposed rules are negligible. The proposed rules will not require any changes to the design, or the structures, systems and components of any nuclear power plant. Nor will the proposed rules require any changes to licensee programs and procedures for actual operation of nuclear power plants. Thus, there will be no change in radiation dose to any member of the public which may be

## PLAIN LANGUAGE

The Presidential memorandum dated June 1, 1998, entitled "Plain Language in Government Writing" directed that the Government's writing be in plain language. This memorandum was published on June 10, 1998 (63 FR 31883). In complying with this directive, editorial changes have been made in these proposed revisions to improve the organization and readability of the existing language of the paragraphs being revised. These types of changes are not discussed further in this document. The NRC requests comments on the proposed rule changes specifically with respect to the clarity of the language used. Comments should be sent to the address listed under the ADDRESSES caption of the preamble.

## 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. The proposed rulemaking addresses two matters: (i) the circumstances under which a licensee may modify an existing EAL without prior NRC review and approval, and (ii) the nature and scheduling of emergency preparedness exercises for licensees of two different 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 such standards. Accordingly, this proposed rulemaking is not within the purview of the National Technology Transfer and Advancement Act of 1995, PL 104-113.

## PAPERWORK REDUCTION ACT STATEMENT

This proposed 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

EALs are part of a licensee's emergency plan. There appears to be an inconsistency in the emergency planning regulations regarding the NRC approval of nuclear power plant licensee 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, continues 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 "EAL's shall be... approved by NRC." However, the current industry practice <sup>in general,</sup> 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 proposed change constitutes a decrease in effectiveness, licensees submit the changes to NRC for review and 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 guidance, it has been the industry practice to seek NRC approval before implementing the change. The NRC has been aware of the industry practice and has not objected to it. The Commission <sup>believes</sup> recognizes that while the current regulations are unclear, <sup>and can be</sup> they are best interpreted to require prior NRC approval for all changes to a licensee's EALs.

(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 1980 regulations required an annual exercise of the onsite and offsite emergency plans. In 1984, the regulations were amended 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). In 1996, the regulations were amended to change the frequency of exercising the licensees' onsite emergency plan from annual to biennial (61 FR 30129, June 14, 1996). 10 CFR Part 50, Appendix E, 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 (emphasis added). 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: whether *each licensee* must participate in a full-participation exercise of the off-site plan every two (2) years, or whether the licensees may alternate their participation such that a full-participation exercise is held every two (2) years and each licensee (at a two-licensee site) participates in a full-participation exercise every four (4) years.

Upon consideration of the language of the current regulation, and the legislative history of the exercise requirements, the Commission believes that <sup>the ambiguity in the current regulation can be</sup> ~~the better~~ interpretation is that each <sup>led such</sup> nuclear power plant licensee co-located on the same site must participate in a full-participation offsite exercise every two years (and that each offsite authority is to participate on either a full or partial participation basis in each licensee's biennial offsite exercise). ~~Nonetheless,~~ <sup>upon</sup> consideration of the matter, the Commission believes that requiring each licensee on a co-located site to participate in a full-participation exercise every two years, and for the offsite authorities to participate in each licensee's full-participation exercise is not necessary ~~in all~~ <sup>cases</sup> 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 ~~would~~ <sup>could</sup> arguably 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 a single site. These plants may be owned and/or operated by different licensees. Therefore, the Commission believes that this rulemaking is necessary in order to remove the ambiguity in Paragraph IV.F.2 and clearly specify the emergency preparedness training obligations of co-located licensees.

The Commission proposes that where two nuclear power plants licensed to separate licensees are co-located on the same site, 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, (3) the interface between offsite plans and each of the 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 proposed rule requires the other co-located licensees to participate in activities and interaction with offsite authorities. For the period between exercises the proposed rule requires the licensees to conduct emergency preparedness activities and interactions. The purpose of A&I would be to test and maintain interface functions among the affected State and local authorities and the licensees.

The proposed rule defines co-located licensees as licensees that share many 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

## II. Background

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

EALs are thresholds of plant parameters (such as containment pressure and radiation levels) utilized 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.

Paragraph §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 "EALs 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.

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

The NRC's current regulations contained in 10 CFR Part 50, Appendix E 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 straight forward on its face, has implementation and compliance problems when 2 licensees occupy the same site 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 2 licensees, Nine Mile Point and James A. FitzPatrick site. However, the current trend in the nuclear industry is to locate new plants on currently approved sites, possibly with different licenses, thus the need for this proposed rule change.

### III. Rulemaking Options For Both Revisions

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 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 review for approval new EAL schemes or revisions to EALs that diminish the effectiveness of the emergency plans

(§50.54(q) criteria). The rulemaking would provide a means for licensees to improve their EALs

while reducing  
unnecessary regulatory burden.

that do not decrease the effectiveness of the emergency plan  
Once the rule is revised, licensees could make minor EAL changes without prior NRC approval.

This approach reduces the unnecessary regulatory burden on licensees.

Option 2 for EAL changes would <sup>retain the inconsistency in the regulations</sup> require NRC to notify nuclear power reactor licensees that their current practice of changing EALs (even minor changes) without the NRC's approval, is a violation of Appendix E to 10 CFR Part 50, thereby increasing the unnecessary burden on licensees and the NRC staff, <sup>in addressing questions on a case-by-case basis.</sup>

Option 1 for co-located licensee would maintain safety because EP 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 reflects 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 ambiguous understanding of the requirements. This option would require NRC resources to conduct the rulemaking. The activities and interactions that would test and maintain interface functions for co-located licensees and offsite authorities in the period between exercises (outlined in this Federal Register Notice) will provide a consistent expectation and basis for such activities. The level of activities and interactions 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 licensee situations. The impact of these continued ambiguities is

As noted above, the impact on a co-located licensee to implement the proposed rule change is a modest 30 hour(s) per year per co-located licensee. This time would be used to maintain a log of the activities and interactions with offsite authorities. At an assumed average hourly rate of \$156/hour, the total industry implementation cost is estimated at \$9360. The cost for an individual co-located licensee is \$4680 per year.

With respect to the EAL rule change, licensees would save staff time by having explicit NRC requirements and guidance that should assist the licensees in the proper submittal of EAL changes. The impact of improved regulations on the NRC is a decrease in the amount of staff time needed to approve license EAL changes. This is estimated to be about a 100 staff-hour reduction or a \$8000 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 for review and approval.

There would be several additional benefits associated with these amendments. The greatest would be the increased assurance that the Commissions 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 license EAL change as well as future co-located licensee's exercise requirements that NRC would need to approve. Another beneficial attribute to this proposed action is regulatory efficiency resulting from the expeditious handling of future license <sup>log 20 hours</sup> 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 Proposed Action

As discussed above, the additional burdens on a licensee and the NRC are expected to be modest. However, <sup>a revision of the</sup> ~~the revised requirements are necessary~~ <sup>is desirable</sup> to ensure that nuclear power remove ambiguities in the current regulations, while maintaining safety and reducing unnecessary regulatory burden.

reactor licensees provide for adequate protection of the public health and safety in face of a changing competitive and regulatory environment not envisioned when the reactor emergency planning regulations were promulgated and that the changes to the regulations are in accord with the common defense and security.

#### VIII. Implementation

The NRC staff proposed that any Federal rulemaking take effect 90 days after publication of the final rule in the Federal Register.

The Commission requests public comment on the draft regulatory analysis.

Comments on the draft analysis may be submitted to the NRC as indicated under the ADDRESSES heading.

#### REGULATORY FLEXIBILITY CERTIFICATION

In Accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission hereby certifies that the proposed rule changes will not have a significant economic impact on a substantial number of small entities. These proposed revisions 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, 5 U.S.C. 601, or the size standards adopted by the NRC (10 CFR 2.810).

#### BACKFIT ANALYSIS

##### (1) NRC approval of EAL Changes

The proposed rule, which eliminates the need for NRC review and 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 the emergency plan which do not decrease the effectiveness of the plan, 10 CFR Part 50, Appendix E currently requires NRC review and

that "EAL's shall be ....

approved by NRC."

~~approval of all changes to EALs.~~ The proposed rulemaking would <sup>clarify</sup> relax the Appendix E requirement to <sup>clearly</sup> permit licensee changes to EALs without NRC review and approval if the changes do not decrease the effectiveness of the emergency plan. The proposed rule requires NRC review and approval for those EAL changes which decrease the effectiveness of the emergency plan, or constitute a change from one EAL scheme to another. ~~The proposed rule provides a voluntary alternative to compliance with the current rule; licensees are free to seek~~

~~NRC approval of all EAL changes.~~ Accordingly, <sup>clarifies the requirements and</sup> the proposed rulemaking represents <sup>the</sup> a current practice of making changes under 50.54(g) voluntary relaxation of current requirements and is therefore not a backfit.

In addition, the proposed change 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 in 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 proposed rulemaking.

## (2) Co-Located Licensee

The proposed rulemaking, which addresses the regulatory ambiguity regarding exercise participation requirements for co-located licensees, applies only 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 proposed 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 two years. The backfit may not fall within the scope of the compliance exception, 10 CFR



Paragraph 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). Sections 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). Paragraph 50.13, 5054(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,a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (43 U.S.C. 4332). Sections 50.34 and 50.54 also issued under pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Paragraph 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. Paragraph IV. B is revised to read as follows:

\* \* \* \* \*

B. \* \* \*

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 EALs shall be discussed and agreed on by the applicant or licensee and State and local governmental authorities, and approved by the NRC. Thereafter, EALs shall be reviewed with the State and local governmental authorities on an annual basis. A revision to an EAL must be approved by the NRC if: (1) a licensee is changing from one EAL scheme to another EAL scheme (e.g. a change from an EAL scheme based on NUREG-0654 to a scheme based upon NUMARC/NESP-007) or (2) the EAL revision decreases the effectiveness of the emergency plan. A licensee shall submit each request for NRC approval of the proposed EAL change as specified in Section 50.4. If a licensee makes a change to an EAL without NRC approval, the licensee shall submit, as specified in Section 50.4, a report of each change made within 30 days after the change is made.

3. Appendix E, Paragraph IV.F.2.c. is revised to read as follows:

\* \* \* \* \*

c. Offsite plans for each licensee 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 licensee it shall fully participate in one exercise every two years and shall, at minimum, partially participate<sup>5</sup> in other offsite plan exercises in this period.

If two licensees are located on any one site (co-located licensees)<sup>6</sup> each licensee shall: (1) conduct an exercise biennially of its onsite emergency plan, (2) participate quadrennially in an offsite biennial full or partial participation exercise, and (3) conduct emergency planning activities and interactions in the three years between its participation in the offsite full or partial participation exercise with offsite authorities, in order to test and maintain interface functions among the affected State and local authorities and the licensee.

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<sup>6</sup> Co-located licensees are licensees that share <sup>many of</sup> 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

Dated at Rockville, Maryland, this      day of      , 2003

For the Nuclear Regulatory Commission

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Annette Vietti-Cook,  
Secretary of the Commission

NOTATION VOTERESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER DICUS

SUBJECT: SECY-03-0067 - PROPOSED AMENDMENTS TO 10 CFR  
PART 50, APPENDIX E RELATING TO (1) NRC APPROVAL  
OF CHANGES TO EMERGENCY ACTION LEVELS (EAL)  
PARAGRAPH IV.B. AND (2) EXERCISE REQUIREMENTS  
FOR CO-LOCATED LICENSEES, PARAGRAPH IV.F.2.

Approved x Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

**COMMENTS:**

Agree with Chairman's edits to the associated Federal Register  
Notice.

Aneta Fox Dicus  
SIGNATURE

May 26, 2003  
DATE

Entered on "STARS" Yes \_\_\_\_\_ No \_\_\_\_\_

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER MCGAFFIGAN

SUBJECT: SECY-03-0067 - PROPOSED AMENDMENTS TO 10 CFR  
PART 50, APPENDIX E RELATING TO (1) NRC APPROVAL  
OF CHANGES TO EMERGENCY ACTION LEVELS (EAL)  
PARAGRAPH IV.B. AND (2) EXERCISE REQUIREMENTS  
FOR CO-LOCATED LICENSEES, PARAGRAPH IV.F.2.

Approved X Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

*Approved subject to the edit of the  
Chairman and Commissioner Merrifield to  
the Federal Register notice.*

*Edward M. McGaffigan*  
\_\_\_\_\_  
SIGNATURE

*June 13, 2003*  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes X No \_\_\_\_\_

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER MERRIFIELD

SUBJECT: SECY-03-0067 - PROPOSED AMENDMENTS TO 10 CFR  
PART 50, APPENDIX E RELATING TO (1) NRC APPROVAL  
OF CHANGES TO EMERGENCY ACTION LEVELS (EAL)  
PARAGRAPH IV.B. AND (2) EXERCISE REQUIREMENTS  
FOR CO-LOCATED LICENSEES, PARAGRAPH IV.F.2.

Approved ☒ Disapproved ☐ Abstain ☐

Not Participating ☐

COMMENTS:

Approved subject to the attached edits  
and Chairman Diaz's edits to the  
Federal Register Notice.

  
\_\_\_\_\_  
SIGNATURE

6/6/03  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes ☒ No ☐

(through use of a single consistent standard for evaluating all emergency plan changes) and reducing unnecessary regulatory burden on licensees (who would no longer be required to submit for approval EAL changes that have no regulatory significance).

One kind of EAL change which the Commission believes will always involve a potential reduction in effectiveness is where a licensee proposes to convert from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007-based). While the new EAL scheme may, upon review, be determined by the NRC to provide an acceptable level of safety and be in compliance with applicable NRC requirements, the potential safety significance of a change from one EAL scheme to another is such that prior NRC review and approval is appropriate to ensure that there is reasonable assurance that the proposed EAL change will provide an acceptable level of safety or otherwise result in non-compliance with applicable Commission requirements on emergency preparedness.

Accordingly, the Commission proposes to revise Appendix E to 10 CFR Part 50, to provide that NRC approval of EAL changes would be necessary for all EAL changes that decrease the effectiveness of the emergency plan and for licensees who are converting from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007-based). ~~Licensees may make changes to EALs without NRC review and approval if the proposed EAL change does not decrease the effectiveness of the emergency plan or constitute changing from one EAL scheme to another.~~

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

A. Rulemaking addressing exercise requirements for co-located licensees.

- *Licensee provide radiological instrument calibration services to local government*
- *Licensee support of local government during annual Public Notification System (PNS) system test*
- *Licensee provides use of weapons firing range to local and state law enforcement (Sheriff, State Police)*

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

***Paragraph IV. B - Assessment Actions.***

This paragraph would be amended by adding new language in 10 CFR Part 50, Appendix E, Paragraph IV.B. governing the type and scope of EAL changes that must receive NRC approval prior to implementation. The proposed amendment clarifies that NRC approval of EAL changes would be required for changes that decrease the effectiveness of the emergency plan and for licensees who are converting from one EAL scheme (e.g., NUREG-0654-based) to another EAL scheme (e.g., NUMARC/NESP-007-based). ~~NRC approval would not be necessary for EAL changes that do not decrease the effectiveness of the emergency plan or do not constitute a change from one EAL scheme to another.~~ The proposed language also clarifies the existing requirement that applicants for initial reactor operating licenses and initial combined licenses (COL) must obtain NRC approval of initial proposed EALs.

Paragraph IV.B would also be amended by adding language analogous to the last sentence of 10 CFR 50.54(q), to clearly state that EAL changes which are made without NRC review and approval, as well as licensee requests for review and approval of EAL changes under the proposed language, must be submitted in accordance with the requirements of Section 50.4. The Commission proposes to follow the current practice of approving EAL changes without the use of a license amendment.