



Illinois Emergency Management Agency

PR 50 and 52  
(74FR23253)

Pat Quinn, Governor

Andrew Velasquez III, Director

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October 15, 2009

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attn: Rulemaking and Adjudications Staff

Subject: Enhancements to Emergency Preparedness Regulations, FR Vol. 74, No. 94,  
Monday May 18, 2009

To Whom It May Concern:

The Illinois Emergency Management Agency (IEMA) believes the efforts of the NRC to revise the current rule on Emergency Planning 10CFR50.4 is a positive step to update this rule based on insights gained in Emergency Preparedness. Before providing specific comments on the proposed rule and guidance documents a few general comments are in order.

IEMA recommends that the NRC and FEMA agree on the purpose of NUREG-0654, Rev. 1. In the past, the NRC has always clearly indicated that NUREGs are not a substitute for the regulations. The most recent example of this is the voting record of the Commission from SECY-08-0182 that states: "NUREG-0654/FEMA-REP-1, Rev. 1 does not contain NRC regulations or requirements. Regulatory Guide 1.101, Revision 4, "Emergency Planning and Preparedness for Nuclear Power Reactors," issued July 2003 (ML032020276) identifies it as an acceptable method for showing compliance with the Commission's emergency preparedness regulations. The NRC uses the methods described in this guide, including NUREG-0654/FEMA-REP-1, Rev. 1, to evaluate emergency plans for nuclear power reactors. As with all NRC regulatory guidance, compliance is not required and applicants or licensees may propose alternative methods of complying with the requirements. Similarly, the NRC recognizes that FEMA may find alternatives used by State and local governments to be acceptable means for meeting the planning standards and the evaluation criteria in NUREG-0654/FEMA-REP-1, Rev. 1."



Template = SECY-067

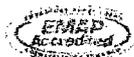
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Contrary to the above interpretation FEMA states the following from Federal Register, May 18, 2009, Volume 74, Number 94: "The NRC and FEMA have also developed a number of evaluation criteria that the agencies used to determine compliance with each of the 16 planning standards. Those evaluation criteria are contained in NUREG-0654 which is incorporated by reference into FEMA's regulations at 44CFR, Part 350, as well as contained in NRC regulations at 10CFR, Part 50. As such, the criteria established in NUREG-0654 are binding upon both NPP licensees and the OROs responsible for offsite emergency preparedness planning in the areas surrounding the NPP."

IEMA feels that the obscure language in the FEMA Federal Register notice implies NUREG-0654 is regulation contrary to the NRC's interpretation, therefore, IEMA recommends that FEMA add a statement to the REP manual similar to the one the NRC used in SECY-08-0182.

IEMA's second comment is related to risk and consequences of an accident. At the time the current rule on Emergency Planning was issued, WASH 1400 or the Reactor Safety Study was considered to be the definitive reference to characterize and quantify reactor accidents and their consequences. Also at the time NUREG-0396, Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants, laid the foundation for the 10-mile EPZ. Today it is acknowledged that the results from the Reactor Safety Study are considered to be unrealistic. The NRC has recognized this with their current efforts to more accurately characterize the consequences of a reactor accident by funding the SOARCA (State of the Art Reactor Consequence Analyses) Project. Although this project is not complete, it has progressed to the point where it should be considered when evaluating any changes to the current Emergency Planning Rules. Specific attention is drawn to two conclusions presented at the March 11, 2009 Regulatory Information Conference: 1) "For unmitigated sensitivity cases-no LERF" and 2) "Releases are dramatically smaller and delayed from 1982 Sitting Study (SSTI)". While the SOARCA project has not been completed, IEMA believes these two conclusions and any other significant conclusions should be considered in any discussion of the proposed rule change. Our attached comments on the rule and related guidance will reference these conclusions for SOARCA where the timing and magnitude of the release are relevant.

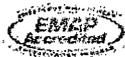
IEMA's third comment concerns the proposed revision to 10CFR, Part 50, Appendix E, and Section IV.A.7 is unnecessary and does not meet the intent of increasing emergency preparedness for hostile action events as it is impossible to analyze all potential scenarios. This change requires licensees to ensure that ORO personnel assigned emergency plan implementation duties would be available to do so during hostile action events. Our objection to this proposed rule change is based on the regulatory interpretation that offsite activities are the purview of the Federal Emergency Management Agency (FEMA); licensees have no jurisdiction or authority to dictate offsite emergency personnel assignments. The choice of the word "ensure", in the proposed rule implies that the licensee has some legal authority offsite which is clearly not the case. While many lessons have been learned in the pilot Hostile Action Drill program, it is not warranted to change the regulations to accommodate one type of scenario. In



fact, one of the dangers exposed during this hostile action drill pilot was to treat the scenario differently from a REP exercise. IEMA has hosted and participated in five Hostile Action Drills and as such has more experience than any other State in this area. New program planning for radiological emergencies is based on planning for a wide spectrum of accidents. If there is a planning issue, it will be identified in the evaluated exercises that are required by current regulation and provide the basis for the reasonable assurance finding. Also in Illinois through mutual aid agreements; local emergency responders are augmented whenever an emergency overwhelms their local response capabilities. Adequate emergency response is not ensured by analyzing every conceivable scenario and assigning a certain number of first responders. This method would fail the first time a real life incident differed from previously analyzed scenarios.

IEMA's final comments concerns the change to 10CFR, Part 50, Appendix E, Section IV, D.3 requiring backup measures for Alert and Notification Systems (ANS) as currently written is unclear. IEMA recommends that the NRC and FEMA guidance be revised to include the following paragraph from Page 5-10 of the draft, "Technical Basis for the Emergency Preparedness Rulemaking", dated May 13, 2009; "The NRC would also revise its guidance to clarify that backup warning measures do not need to be implemented with a 15- minute timeframe (to ensure direct coverage of essentially 100 percent of the population within 5-miles of the site) or a 45-minute timeframe (to ensure 100 percent coverage of the population who may not have received the initial notification, such as those in rural or recreational areas), because this would impose the same design objectives on the backup system as those for the primary and compensatory alerting methods described in Appendix 3 to NUREG-0654 (Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), ASLB-88-2, 27 NRC 85 (1988)). The staff recognizes some backup methods may not be capable of meeting the timeframes that are part of the primary ANS design objectives. The intent is not to have a duplicate primary ANS but to have a means of backup notification in place so that the populace can be alerted in sufficient time to allow offsite officials to consider a range of protective actions for the public to take in the event of a severe accident with potential offsite radiological consequences. A graded approach in which the populations most at risk are alerted and notified first, followed by alerting and notification of people in less affected areas, is acceptable for the backup means. There would be no regulatory requirement for siren backup power. Although siren backup power would address one of the more common failure modes for fixed siren-based systems, other failure modes might still exist. Thus, it is important that the backup means be independent of the primary system so that it is not subject to the same type of failure mechanism."

IEMA also notes that the term "sufficient time" used in the NRC draft section related to backup ANS will lead to many disagreements in interpretation as it is a subjective metric. In the interest of risk-informed regulation this time could be derived from the preliminary results of the SOARCA study. Therefore, IEMA recommends that "sufficient time" be replaced with "3-hours" as no credible accident sequences would produce a release in less than 3-hours.



Other specific comments on the draft proposed NRC rule as well as comments on NSIR/DPR-ISG-01, DRAFT INTERIM STAFF GUIDANCE, are provided in the attachment. IEMA has no comments on DRAFT Reg. Guide DG-1237 or the draft NUREG/CR on Time Evacuations Estimates.

Sincerely,



Andrew Velasquez, III  
Director

KE/tc

Attachment(s)

cc: File 3.B [09-02]



## ATTACHMENT

### SPECIFIC COMMENTS ON PROPOSED NRC RULE ON EMERGENCY PREPAREDNESS AND NSIR/DPR-ISG-01

1. The IEMA welcomes changes to 10CFR50.47 (b) and 10CFR50, Appendix E, Sections IV.F.2.a, 2.b, 2.i, 2.j; that increase scenario realism and help eliminate predictability and preconditioning. The rule as written is much more complex than it needs to be. While the goal is to ensure that there is a mixture of scenario types, the specificity delineated in the rule dictates that one type of predictability will be replaced by another. Two changes would accomplish the Commission's goal of more variability; (1) Change the exercise cycle from six to eight years, with one hostile action-based exercise per cycle. (2) Require exercises to vary from no release to a large release for an ingestion exercise. Instead of requiring a rapidly escalating event, scenarios used should be based on credible accident sequences and timing. This would accomplish another goal of realistic training for exercise participants.
2. IEMA believes that the proposed change to 10CFR50, Appendix E, Section IV.C.2 to declare an Emergency in 15 minutes is a positive change and long overdue.
3. On Page 19 of NSIR/DPR-ISG-01, the NRC has increased the demands on licensees to verify that offsite plans include arrangements for alternate resources, that mutual aid agreements are in place and to review offsite resources to determine if adequate resources are available. In addition, the NRC states that OROs should address the training of alternate personnel and the maintenance of additional duty rosters of qualified personnel. As stated previously the licensee should not be assigned responsibilities for auditing offsite emergency preparedness.
4. On Page 45 of ISG-01 there is a discussion of the criteria that will be used to evaluate backup ANS systems. The NRC is to be commended for at least attempting to clarify this complex issue. The problem is that this area is not adequately addressed in any of the FEMA documents currently out for review. Another potential problem is that the NRC mentions it is proposing changes to Appendix 3 to NUREG-0654, while FEMA has already proposed to changes to NUREG-0654 in Supplement 4. When NUREG-0654 was issued it was a joint NRC/FEMA publication. NRC and FEMA have separately proposed guidance relating to backup ANS systems. Each entity is proposing eventual amendments to NUREC-0654 that would result in guidance on this issue being split into separate sections thus leading to confusion. We recommend that the guidance on backup ANS systems be consolidated into a single appendix, supplement or other section of 0654.



## Rulemaking Comments

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**From:** Evans, Ken [Ken.Evans@illinois.gov]  
**Sent:** Friday, October 16, 2009 1:37 PM  
**To:** Rulemaking Comments  
**Subject:** FW: Message from KMBT\_501  
**Attachments:** SKMBT\_50109101611470.pdf

Attached is a corrected copy of comments that were sent yesterday in a previous E-mail. Yesterday's E-mail contained comments that were intended for FEMA. The correct version has been mailed by hard copy if there are any questions. In addition I may be reached at 217-558-6248 for any questions. Again sorry for the confusion and please disregard my E-mail of 10/15/09.

Ken Evans

Please visit the nuclear safety section of the Agency's website at [www.iema.illinois.gov/iema/dns.asp](http://www.iema.illinois.gov/iema/dns.asp) for the latest information concerning the Division of Nuclear Safety's programs. Our website includes important information such as new and proposed requirements, guidance, events and other pertinent items of interest.

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**From:** copier-op4a@op.iema.net [mailto:copier-op4a@op.iema.net]  
**Sent:** Friday, October 16, 2009 12:48 PM  
**To:** Evans, Ken  
**Subject:** Message from KMBT\_501

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From: "Evans, Ken" <Ken.Evans@illinois.gov>

To: <Rulemaking.Comments@nrc.gov>

Return-Path: Ken.Evans@illinois.gov

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