

December 1, 2003

Vanessa E. Quinn, Chief
Radiological Emergency Preparedness Branch
Technological Services Division
Federal Emergency Management Agency
500 C Street, S.W.
Washington, D.C. 20472

SUBJECT: REQUEST FOR ASSISTANCE TO ADDRESS A CONCERN REGARDING THE
EVALUATION OF SIGNIFICANT CHANGES TO THE ALERT AND
NOTIFICATION SYSTEM TESTING METHODOLOGY

Dear Ms. Quinn:

We request the assistance of the Federal Emergency Management Agency (FEMA) in addressing a concern by the NRC regarding the evaluation of changes to the Alert and Notification System (ANS) testing methodology.

When making a change to ANS testing methodology that affects the calculation of the siren operability percentages, is a licensee required to submit this change to FEMA for approval prior to its implementation in accordance with 44CFR350.14?

For example, a change could be proposed and made to the method used to calculate siren operability percentages. A licensee could change the testing procedure from sending a single activation pulse to sending three activation pulses over a 1-minute time period. A success would result if any of the three individual activation pulses was received, rather than counting each activation pulse as a data point. The only time an activation failure would be declared is when all three activation pulses are unsuccessful. This change in testing methodology could potentially mask failures and a degrading trend in system performance, which may have been identified by the previous testing methodology.

On page E-9 of FEMA-REP-10, *Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants*, it states: "Once the siren system is installed and operational, the licensee should develop and implement a routine siren testing and operability program (see Appendix 4: A Summary of Design Report Routine Siren Testing Procedures and Operability Requirements)." Appendix 4 of FEMA-REP-10 states that as part of the ANS approval process, FEMA will review and accept a routine siren testing program, and verify the siren operability average estimated from the results of the siren testing program, as it was implemented for the 12 months preceding submission of the design report. Appendix 4 goes on to state: "Acceptability of the routine siren testing procedures is an important part of the overall alert and notification system review since the operability percentage will be derived from implementation of these procedures." Appendix 4 also includes a generic checklist that is recommended to be used when submitting the routine siren testing program and computation of the operability percentage. This checklist includes a "description of the method used to calculate the siren operability percentage".

Please review this issue concerning significant changes to the Alert and Notification System (ANS) testing methodology and provide us a report of the results of your review. This matter has been discussed between our respective staff members, and a date of December 31, 2003, has been selected as a proposed goal for FEMA's response to this request for assistance. Please let us know if this date is not acceptable. Should you need any assistance with this matter, please contact Ms. Debra A. Schneck of my staff at 301-415-3079.

Sincerely,

/RA/

Eric W. Weiss, Chief
Emergency Preparedness and
Health Physics Section
Emergency Preparedness
and Plant Support Branch
Division of Inspection Program Management
Office of Nuclear Reactor Regulation

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EPHP Reading File

E. Weiss

D. Schneck

ADAMS ACCESSION NUMBER: ML033290208

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DATE	12/1/2003	12/1/2003	12/1/2003	

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