

NOV 21 1979

MEMORANDUM FOR: G. H. Smith, Chief, FPMSB, RI

FROM: D. Donaldson, Radiation Specialist *DD*

SUBJECT: COMMENTS ON NUREG-0610

I am in full support of the basic intent of NUREG-0610, i.e., the establishment of EALs based on the actual as well as potential consequences of a given event. I do, however, have several comments related to other aspects of the document. Specifically, I do not agree with the nomenclature designations of the various emergency classes or with the sorting of example initiating conditions for the various classes.

The NUREG-0610 classes described represent a departure from the sound planning philosophy articulated in Regulatory Guide 1.101 which states:

"The system of classification employed should consist of mutually exclusive groupings (to avoid ambiguity) . . . Each class defined should be associated with a particular set of immediate actions to be taken to cope with the situation. This section should note that various classes of accidents require a graded scale of responses."

The classification system described in NUREG-0610 does NOT consist of mutually exclusive groupings, primarily due to the sorting of the example initiating conditions for the various classes. There is a great deal of ambiguity in these examples also. Further, the class nomenclature, "Notification of an Unusual Event," implies that events encompasses within this class are not of an "emergency" nature. The example initiating conditions for this class illustrate the ambiguity and lack of graded response which may result.

For example, the EAL, ECCS initiation, requires exact, lengthy description such that a distinction can be made between an ECCS initiation resulting from spurious signals or non-emergency transients and an ECCS initiation indicative of "emergency" transients of the Site (or higher) emergency type. EAL 2, Radiological effluent technical specification limits exceeded, is another example where ambiguity and overlap, rather than a grading of a response is evident. Of the remaining EALs for the class, "Notification of an Unusual Event," some are "Alert" in nature and others are "emergency" in nature, encompassing the present R.G. 1.101 classes from Personnel to Plant (Unit).

8004020138

The EALs for the Alert class also give one cause for concern. It may be seen from the TMI accident that a "severe loss of fuel cladding" Alert EAL 1, certainly warrants more than an alert.

Apparently, the 0610 classes of "Alert" and "Notification of an unusual event" are intended to replace the present R.G. 1.101 classes of Plant (Unit) Emergency and Emergency Alert respectively, and are intended to provide a graded scale of notification. It seems impractical to assign nomenclature to an emergency class based upon the extent of notification rather than the extent of the response that would be prudent to assess or implement protective actions. The graded notification distinction could more appropriately be made by slightly redefining the present R.G. 1.101 Alert and Plant classes to include such notifications.

Finally, the NUREG-0610 classification scheme does not adequately classify events which have consequences limited to the confines of the buildings or areas on the site. The system is "offsite" effect heavy and has reduced emphasis on the "smaller" incidents which, if not properly handled, could escalate.

In line with the above, I propose the following:

1. Utilize a five class system patterned after R.G. 1.101 having the following classes;
 - a. Local (Personnel)
 - b. Alert
 - c. Plant (Unit)
 - d. Site
 - e. General
2. That the present Alert concept in R. G. 1.101 be more clearly defined to specify that there are two phases of alerts - alert of the licensee and alert of the offsite agencies.
3. Revise R.G. 1.101 to specify that immediate notification is to be made to offsite agencies in the event of a Plant (Unit) Emergency.
4. The EAL approach suggested by NUREG-0610 be adopted, but clarified with regard to the example initiating conditions

I have enclosed a marked-up copy of NUREG-0610 which incorporates examples of the above suggestions. Also included is a memo to file related to NUREG-0610 which I had written previously.

Dale E. Donaldson

Dale E. Donaldson
Radiation Specialist

encl

NUREG-0610 changes
Memo to File, dated 10/2/79

cc
R. Bores

Donaldson



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

SEP 19 1979

The USNRC Office of Nuclear Reactor Regulation has developed draft Emergency Action Level Guidelines to improve the emergency preparedness capabilities around operating nuclear power plants. The enclosed draft guidelines for interim use, published as NUREG-0610, establishes four classes of Emergency Action Levels replacing the classes in Regulatory Guide 1.101. The new classes are Notification of Unusual Event, Alert, Site Emergency, and General Emergency.

Public comments on these draft guidelines are solicited. All comments sent to:

Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, DC 20555
Attention: Docketing and Service Branch

and received by December 1, 1979, will be considered by the Commission.

Sincerely,

A handwritten signature in cursive script that reads "Harold R. Denton".

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure:
As Stated

*dupe of PDR
1A
7911140225*

U.S. NUCLEAR REGULATORY COMMISSION
DRAFT EMERGENCY ACTION LEVEL GUIDELINES
FOR NUCLEAR POWER PLANTS

September 1979

OFFICE OF NUCLEAR REACTOR REGULATION
U.S. NUCLEAR REGULATORY COMMISSION

DUPLICATE DOCUMENT
Entire document previously entered
into system under:
ANO 79114020230
No. of pages: 18

dupe
~~7910170151~~
791140230

BASIS FOR EMERGENCY ACTION LEVELS FOR NUCLEAR POWER FACILITIES

This document is provided for interim use during the initial phases of the NRC effort to promptly improve emergency preparedness at operating nuclear power plants. Changes to the document can be expected as experience is gained in its use and public comments are received. Further, the Commission has initiated a rulemaking procedure, now scheduled for completion in January 1980 in the area of Emergency Planning and Preparedness. Additional requirements are to be expected when rulemaking is completed and some modifications to this document may be necessary.

Four classes of Emergency Action Levels are established which replace the classes in Regulatory Guide 1.101, each with associated examples of initiating conditions. The classes are:

~~Notification of Unusual Event~~
~~Local (Personnel) Emergency~~
Alert
~~Plant (Unit) Emergency~~
Site Emergency

General Emergency

~~The rationale for the notification and alert classes is to~~ *changes to the* ~~provide early and~~ *and Plant emergency*
prompt notification of minor events which could lead to more serious consequences given operator error or equipment failure or which might be indicative of more serious conditions which are not yet fully realized. A gradation is provided to assure fuller response preparations for more serious indicators. The site emergency class reflects conditions where some significant releases are likely or are occurring but where a core melt situation is not indicated based on current information. In this situation full mobilization of emergency personnel in the near site environs is indicated as well as dispatch of monitoring teams and associated communications. The general emergency class involves actual or imminent substantial core degradation or melting with the potential for loss of containment. The immediate action for this class is sheltering (staying inside) rather than evacuation until an assessment can be made that (1) an evacuation is indicated and (2) an evacuation, if indicated, can be completed prior to significant release and transport of radioactive material to the affected areas.

The example initiating conditions listed after the immediate actions for each class are to form the basis for establishment by each licensee of the specific plant instrumentation readings which, if exceeded, will initiate the emergency class.