



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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September 20, 1996

MEMORANDUM TO: Distribution

FROM: Thomas T. Martin, Director
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

SUBJECT: BRIEFING PAPER ON SUP 3 TO NUREG-0654

A handwritten signature in dark ink, appearing to read "Thomas T. Martin", is written over the typed name and title of the Director.

Attached for your information is a briefing paper on Draft Supplement 3 to NUREG-0654/FEMA-REP-1, "Criteria for Protective Action Recommendations for Severe Accidents." Supplement 3 was noticed in the Federal Register on August 26, 1996 (61 FR 43794) for interim use, public review, and comment.

This briefing paper is being distributed to provide NRR and Regional staff a common basis for statements concerning the guidance in Supplement 3. It should assist in responding to any questions from concerned officials or members of the public regarding the philosophy used in Supplement 3.

Please distribute this memorandum and its attachment to members of your staffs who may need to refer to it to respond to public inquiries.

Attachment: Briefing Paper

Briefing Paper on Supplement 3 to NUREG-0654/FEMA-REP-1

Criteria for Protective Action Recommendations for Severe Reactor Accidents

- Sup 3 to NUREG-0654 is a draft document which was issued for interim use, public review, and comment in the Federal Register on 8/26/96 for a 90-day comment period.
- Sup 3 provides guidance to licensees and State and local officials for developing protective action recommendations (PARs) for the public for severe reactor accidents involving actual or projected core damage with the potential for loss of containment integrity.
- Guidance on PARs for severe accidents was originally provided in NUREG-0654 which was issued in 1980. This older guidance indicated that the initial PA for severe accidents was to shelter the population near the plant while authorities considered advising evacuation.
- The NRC staff position and internal guidance for PAs for severe accidents has evolved from the original guidance in NUREG-0654 based on the results of severe accident studies.
- Studies of severe accidents since the publication of NUREG-0654 clearly indicate that the preferred PA is to evacuate rather than shelter the population near the plant.
- Sheltering is still considered a suitable PA for certain limited situations. For example, such an action is prudent if there is the need for the containment to be vented resulting in a short term release in a time frame that does not allow for evacuation. Also, a release that is anticipated during hazardous travel conditions where the risk of exposure to the puff is less than the risk associated with evacuation under such conditions could result in a PA of sheltering.
- Although the original guidance in NUREG-0654 was never intended to imply that the appropriate PA for severe accidents was to only shelter the population near the plant, the guidance was not explicit on this point.
- The NRC has documented the revised guidance in training manuals and staff training courses beginning in about 1987 and has presented the revised guidance at various EP workshops, training courses, and conferences. The revised PA guidance has also been taught to offsite officials in FEMA training courses for a number of years.

Attachment

- All emergency plans have had the concept of evacuation for severe accidents since the issuance of NUREG-0654 in 1980. SUP 3 simplifies the decisionmaking process by emphasizing that PAs should be based on plant conditions rather than dose calculations and that evacuation is the preferred initial PA for severe accidents, barring any constraints to evacuation such as severe weather.
- The concept of prompt evacuation for severe accidents has been adopted by many licensees and offsite response organizations. This concept has been used in numerous exercises at nuclear power plants.
- However, the NRC and FEMA had not formally transmitted the revised guidance to licensees and offsite response organizations.
- Thus, SUP 3 was developed and issued in the Federal Register to formally bring the guidance to the attention of the EP community and the public.
- The NRC issued a press release on 8/27/96 announcing the issuance of Sup 3.
- FEMA has distributed SUP 3 to its Regional offices with directions to make sure State EP officials are aware of the document.
- The responsibility for protective action decisions still remains with State and local officials who must use their best judgment at the time of the incident to make decisions to protect the public based on information on plant conditions and PARs from the licensee and information from other sources on offsite conditions.
- In addition to the Federal Register notice and press release, the NRC will discuss with FEMA other ways to bring the guidance in Sup 3 to the attention of State and local officials with public safety responsibilities.

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