



JAMES B. COULTER  
SECRETARY

LOUIS N. PHIPPS, JR.  
DEPUTY SECRETARY

STATE OF MARYLAND

DEPARTMENT OF NATURAL RESOURCES  
ENERGY ADMINISTRATION  
TAWES STATE OFFICE BUILDING  
ANNAPOLIS 21401  
(301) 269-2261

DOCKET NUMBER  
PROPOSED RULE PR-NUREG-0654 (8) May 13, 1980  
(45 FR 9768)



Robert G. Ryan  
Div. of Radiological Emergency Preparedness  
Federal Emergency Management Agency  
1725 I Street, NW  
Washington, DC 20472

Dear Mr. Ryan:

The following comments on Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, NUREG-0654, are offered by The Maryland Power Plant Siting Program, an agency which provides technical support to lead State agencies on the subject of emergency planning.

It is now generally acknowledged that emergency planning in the vicinity of nuclear power plants has not reflected improved understanding of the potential consequences of reactor accidents or reduction in levels of radiation considered acceptable. Fortunately, this has resulted in an increased commitment from utilities and all levels of government to upgrade emergency planning. Unfortunately, this awareness, with the accident at Three Mile Island providing additional impetus, has resulted in a backlash at the Federal level. The result of this is the promulgation of rules by the Nuclear Regulatory Commission, the Federal Emergency Management Agency and Congress that are not only unrealistic, but accompanied by unrealistic timetables for implementation.

The proposed criteria do not show the degree of realism that would be expected from emergency planning experts. They instead are composed of what are often arbitrary and simplistic judgements. State and local governments both want and need Federal guidance and assistance in preparing Radiological Emergency Response Plans. However, requirements that cause State and local agencies to

Acknowledged by card. 5/19/80...mdv...

8005290228

drastically reorder their priorities and reallocate their resources without good reason, are a hindrance, rather than a help. The NRC and FEMA should assume a posture allowing the development of working relationships, rather than assuming an adversarial position.

The following specific comments address what we feel to be deficiencies in the interim criteria as presented in NUREG-0654.

1. The NRC and FEMA point out the importance of an integrated response but have yet to provide the States with an integrated Federal response plan.

The failure of the NRC and FEMA to provide an emergency response plan for Federal agencies is a serious omission. With the exception of the resources available through the Department of Energy's Radiological Assistance Program and the Interagency Radiological Assistance Program, the States know little about what specific Federal actions to expect in an emergency. One of the biggest questions revolves around exactly what roles the NRC and FEMA will play in the event of an emergency.

It would be inappropriate for the NRC to send in a team to assume complete control of a reactor from the operator given an emergency. Nonetheless, no assurance has been given that such an action will not take place. It is expected that all operator actions in a post-accident atmosphere will be closely monitored and in some cases directed by NRC personnel. During such situations, it is essential that the NRC constantly communicate its intentions not only to authorities in the resident state, but those in contiguous states. State authorities should be appraised of any actions which may in their judgement require specific responses. An example of failure to do this is afforded in the case of the NRC's handling of the purported presence of the hydrogen bubble in the reactor vessel at Three Mile Island. That the NRC considered directing depressurization of the primary loop without committing to first notify appropriate emergency response personnel represents an unacceptable absence of necessary communication.

An additional problem is the Federal government's insistence that State plans be prepared in the absence of a detailed Federal plan. While the NRC and FEMA have agreed to provide a plan outlining emergency response at the Federal level, they have given no indication of when this plan will be made available. It would seem only appropriate that the Federal government respond in as timely a fashion as they are requiring State governments to respond.

2. The requirements proposed by NRC and FEMA concerning both the composition and location of the nearsite Emergency Operations Facility are contrary to the goal of protecting the public.

It is stated in the interim criteria that "in most cases, the principle operator's nearsite Emergency Operations Facility (EOF) should be within one mile of the reactor." This indicates that a certain amount of flexibility is available for selecting the nearsite EOF, i.e., situations may exist where a location more than one mile distant from the plant may be acceptable. Unfortunately, no such flexibility was apparent when NRC and FEMA representatives visited Maryland to discuss emergency planning with Baltimore Gas and Electric, State and local officials.

No rationale is given for requiring the nearsite EOF to be located in such close proximity to the plant; indeed it is doubtful that any exists. While locating near one's sampling stations may be desirable, the ability to receive monitoring results from field teams is not seriously compromised by moving outside a one mile radius from the plant. Neither does locating within one mile allow better monitoring of how the accident itself progresses. Once one is removed from the control room or technical control center, one becomes dependent on established communication links to assess plant status. In addition, there exists the possibility, admittedly slim, that evacuation of an area including the one mile radius may become necessary. Such an occurrence would necessitate the relocation of a response center containing analyzers and decision makers from a multiplicity of organizations.

These arguments are intended to counteract the contention that a nearsite EOF within one mile of the plant is desirable in all instances. Clinging to such a truism could result in forcing a utility to construct a facility to meet some arbitrary criterion when a realistic alternative already exists. Site specific considerations and the acceptability to State, local and company officials should be crucial in the selection of a nearsite EOF. The one mile rule should not be considered sacred when options exist elsewhere. Forcing the abandonment of reasonable alternatives in order to satisfy capricious regulations will in no way enhance capabilities for protecting the public.

Requiring that the media be accommodated at Nearsite EOF is not justified. It should be recognized that those reporting on an accident and those responding to an accident perform distinctly different functions, neither of which is enhanced by having all participants in the same place. The juxtaposition of technicians and decision makers from the company and each level of government with the media confuses the important but distinct goals of protecting the public and informing the public. Requirements concerning the media are obviously aimed at improving the latter; however, the approach suggested will not best serve that need.

No one denies that the public desire to be informed in an accurate and timely fashion was ill served at Three Mile Island. It is further true that avoiding repetition of this mistake warrants much attention. This can be accomplished by making provisions for accommodating members of the news media and insuring that informed individuals from all appropriate organizations are available for interrogation. Consideration should also be given to providing communication links which would make possible remote questioning of certain participants. Care should be taken to insure that information from all sources is as timely and accurate as possible. Care should also be taken to guarantee that technical information is dispensed in a form comprehensible to laymen. Attention to such detail, rather than having the media looking over the shoulders of those who are trying to analyze samples, interpret data or make decisions, will contribute to improvement over the communications problems experienced at Three Mile Island.

3. The design objectives defining the effectiveness of the early notification system are unrealistic.

It would be beneficial to have the capability of notifying the population residing five or fewer miles from a nuclear power plant within 15 minutes. Unfortunately, it is not realistic to expect that this is possible.

Prompt notification is dependent upon sirens and tone alert devices. Even a system combining both would be unable to satisfy the criteria of the NRC. There are many situations where people would be unlikely or unable to hear warnings; people in air conditioned homes or cars, office buildings or auditoriums are a few. Every indication is that no system capable of meeting the design objectives exists. This is no reason why improvements in present notification systems cannot, or should not, be made. It is a reason, however, why the criterion in NUREG-0654 is unreasonable. It is not useful to impose a 180-day deadline on the installation of a system likely to be both expensive and ineffective. The NRC and FEMA should provide guidance rather than setting arbitrary rules.

1. Attempting to notify individuals in camping and hunting areas by using "aircraft equipped with powerful sound systems or by dropping prepared leaflets" is likely to be unsuccessful.

As stated in the interim criteria, remote areas should be contacted on a best effort basis. What constitutes such a best effort is greatly dependent on specific conditions, and is best left to the judgement of State and local agencies. It is highly unlikely that the sound system or leaflet route would be taken.

The major area in the vicinity of the Calvert Cliffs Nuclear Power Plant where notification would be a problem is the Wildlife Management Area on Taylor's Island. This area might be expected to be occupied by hunters on a seasonal basis; and it is not true that use would be reduced during bad weather. There are many reasons why the proposed means of notification are unlikely to be successful at this site. Duck hunters are as unlikely to leave their blinds to retrieve falling leaflets as they are to see them in the first place. An incredibly large number of leaflets would be required to gain even a small level of assurance that they would reach individuals for whom they are intended. The fact that one would be left with a park or wildlife area blanketed with leaflets is also hardly attractive. The cost of preparing such leaflets and their questionable effectiveness indicate that this is not a worthwhile approach.

The likelihood of achieving a high success level using speakers from airplanes is also questionable. This does not appear to be a logical approach for notifying what will probably be a few people in a large area. And while it is not practical to expect that foul weather will reduce the number of people to be notified, e.g., hunters, it certainly diminishes one's notification capability.

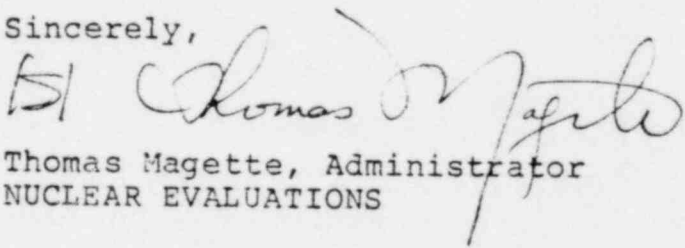
This is not an example of the type of guidance that States and localities are seeking from the NRC and FEMA. Such decisions are best left to those people actually responsible for protecting the health and safety of the public.

5. The NRC should require that operators directly notify Civil Defense Agencies of all jurisdictions within the 10-mile plume zone in the event of a Site or General Emergency.

The NRC and FEMA have neglected to specify in sufficient detail exactly who should be notified and under what conditions. This problem is particularly important in the case where a power plant is located near the boundary of two states. Under these circumstances, direct notification to authorities of the state in which the plant is resident is not adequate. Direct notification to civil defense agencies of all jurisdictions within the plume zone should be required in the event of either a Site Emergency or a General Emergency.

The State of Maryland is very concerned with providing maximum protection for its citizens in the event of a nuclear power plant accident. Efforts to improve planning based on the results of WASH-1400 were in progress here before the NRC generated the interim criteria, and well before Three Mile Island. We do not need to be motivated to act. We ask only that the NRC and FEMA provide such guidance as will lead to a well coordinated and more effective radiological emergency response plan. What is absent is a commitment from the NRC to work with the State; the State needs to know how the NRC will act, and how the NRC will interact with us, in the event of an accident at a fixed nuclear facility affecting Maryland. The provision of a Federal plan, the first request of this letter, will go far in filling the void now present in emergency planning.

Sincerely,

  
Thomas Magette, Administrator  
NUCLEAR EVALUATIONS

TEM:ps

cc: Samuel J. Chilk  
Secretary of the Commission