

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
10 CFR Part 50)
APPENDIX E - EMERGENCY PLANS) Docket No. PRM ____
FOR PRODUCTION AND UTILITIZATION)
FACILITIES)

PETITION FOR RULEMAKING

Pursuant to the 10 CFR §2.802, KMC, Inc. on behalf of itself and the utilities listed in Attachment A (hereinafter referred to as "Petitioners") hereby petitions the Nuclear Regulatory Commission (NRC or Commission) to amend 10 CFR Part 50 Appendix E -- Emergency Plans for Production and Utilitization Facilities to modify the presently proposed requirements for alerting persons within the plume exposure pathway Emergency Planning Zone (EPZ). The responsibility for determining the criteria and timing for alerting such individuals clearly resides with the appropriate State and/or local entities having responsibility for protecting the citizenry, acting with the Federal authority vested in the Federal Emergency Management Agency (FEMA). We submit that all regulatory requirements on a licensee should be consistent and recognize the interrelating and interdependent responsibilities of cognizant Federal, State, and local jurisdictions. No arbitrarily set time period for notification is

appropriate for all situations. In view of the far reaching implications and importance of this "alert" issue, we ask that a separate rulemaking proceeding be established to allow it to be evaluated separately from the other issues relating to emergency planning.

In its proposed rule published for comment in the Federal Register on December 19, 1979, the Commission placed a requirement for alerting and providing prompt instructions to the public within the 10-mile plume exposure pathway Emergency Planning Zone. By footnote the NRC indicated a further requirement that essentially complete alerting of the public should be accomplished within 15 minutes. Further NRC guidance on this issue is documented in Section II.B.5 of "Emergency Planning Acceptance Criteria for Licensed Nuclear Power Plants" which states that State and local plans are required to describe the resources that will provide warning and instruction to the population in the EPZ within 15 minutes. A further requirement states that the testing of the communications system should continue to assure that the warning criterion can be met.

While we agree and fully support the NRC's goals of improving emergency planning in the vicinity of nuclear power plants, there has to be a recognition which is heretofore lacking in NRC regulations and issuances that FEMA, not NRC, has lead responsibility

for requirements pertaining to offsite emergency planning. To require, on a generic basis, that all persons be alerted out to ten miles from a nuclear power plant within 15 minutes of an incident is unnecessary from a safety standpoint and such is an arbitrary and capricious requirement.

It is therefore proposed that Appendix E requirements pertaining to Notification Procedures be amended to state as follows:

"Administrative and physical means, and the time requirements for notifying Federal, State and local officials for warning of the public for evacuation or other protective measures shall be described."

Guidance for NRC review of State and local plans on acceptable times for warning as a function of distance from the plant site as well as ease of taking protective action should be developed as part of this rulemaking. Consideration of such factors as downwind distance, ease of taking protective measures (such as evacuation), type and characteristics of power plant must all be weighed in making any judgment on the adequacy of the warning systems associated with a particular plant. Setting a uniform but arbitrary time for warning, which is but one element in the overall chain of actions that might be required, will not serve to improve the emergency plans of a utility or the emergency planning efforts of the involved State and local agencies as well as FEMA.

The Petitioners as listed in Attachment A are interested persons within the meaning of 10 CFR 2.802 in that the listed utilities own and/or operate nuclear power plants and are responsible for the design and construction of such plants subject to the requirements of 10 CFR 50.34 and 10 CFR Part 50 Appendix E.

A memorandum in support of the Proposed Rulemaking which more fully sets forth the justifications for the proposed rule is attached as Attachment B. The subject matter of this petition has been discussed with the responsible members of the NRC staff.

Because of the importance of this issue, good cause exists to consider this element of emergency planning separately and apart from the rest of the proposed rule. Further study by the staff to justify what must now be considered a completely arbitrary time period and additional time for FEMA and State and local officials as well as affected utilities and members of the public to review such studies is necessary before the Commission can intelligently pass on the wisdom of the proposal. Further procedural safeguards may be a necessary part of this rulemaking. In the meantime the other proposed changes to Appendix E can be considered and acted upon. Use of a case-by-case standard for determining who should be alerted to a particular incident and in what timeframe while the Commission is considering the

alert issue would not result in any adverse effect on safety. Moreover, implementing the Commission's final rule on alerting members of the public at a future time would not be more difficult or costly.

Respectfully submitted,
KMC, Inc.

By Donald F. Knuth

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Date: 2/14/80

LIST OF PETITIONING UTILITIES

American Electric Power Company
Baltimore Gas & Electric Company
Cincinnati Gas & Electric Company
Commonwealth Edison Company
Consumers Power Company
Detroit Edison Company
Duquesne Light Company
Florida Power & Light Company
Jersey Central Power & Light Company
Maine Yankee Atomic Power Company
Mississippi Power & Light Company
Nebraska Public Power District
Northern States Power Company
Omaha Public Power District
Pacific Gas & Electric Company
Public Service Electric & Gas Company
Southern California Edison Company

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MEMORANDUM OF PETITIONERS
IN SUPPORT OF
PROPOSED RULEMAKING

Introduction

On July 17, 1979, the NRC published in the Federal Register an Advanced Notice of Proposed Rulemaking on "Adequacy and Acceptance of Emergency Planning Around Nuclear Facilities" (44 Fed Reg 75167). The Commission in that publication sought to receive early comments on a number of issues in preparation for a rulemaking proceeding on emergency preparedness. Over 113 public comments to that invitation were received; unfortunately, the NRC staff was not allowed sufficient time to receive, read or digest the comments offered by the many respondents. By a memorandum dated July 31, 1979, the Commission requested expedited rulemaking and the NRC staff in its Commission Action Paper, SECY-79-591, dated October 26, 1979, responded to that request. The opening section of that paper indicated the proposed interim rule was hastily written:

"The haste with which this paper was prepared precluded the critical review normally given to actions of comparable significance. Consequently, the staff is concerned that important considerations related to the workability of the proposed rule changes may have been overlooked and that all significant impacts to NRC, applicants, licensees, and State and local governments may not have been identified."

On November 13, 1979, the NRC staff, in an Information Report to the Commissioners, SECY-79-591B, provided its preliminary analysis of public comments. The paper tabulated the responses into the areas of interest to the NRC and characterized the tone of each commentor's response for each issue. In the public meeting concerning this matter before the Commission the commentors' views were not characterized in any greater detail.

The proposed rule on emergency planning was revised during the period of Commission review through deliberations with the Office of the General Counsel (OGC) and the Office of Policy Evaluation (OPE); a revised version was proposed in an Information Report, SECY-79-591C. This version, as published for public comment, contains the requirements which are the subject of this petition. Although it is certain that those responding to the request for comments on this proposed rulemaking will include their views on the issue of warning the populace within the plume exposure pathway of the Emergency Planning Zone within 15 minutes, the importance and implications of this proposed requirement

are sufficiently great to merit removal of this issue from the interim upgrade for separate consideration. The previous track record of staff consideration of public comments submitted as a result of the advance notice of rulemaking leading to the present draft of the proposed rule is a further reason that this matter be subject to hearings to ensure adequate consideration of all viewpoints.

Basis for Emergency Planning

In evaluating accidents at nuclear power plants the potential offsite consequences have traditionally used a conservative set of assumptions. To meet the NRC's siting criteria, each facility must demonstrate a capability to mitigate accident doses below guideline values at the exclusion boundary for a two hour exposure period and at the low population zone distance for the duration of the accident. Although in some circles there is a perception that the Three Mile Island Accident, as the worst accident in the nuclear power reactor history, had radioactive releases from the fuel in excess of a design basis accident, such is not the case. The radioactivity released to the containment was less than that assumed for a design basis accident (DBA) and the rate of release was certainly not instantaneous as assumed in the siting criteria. In addition, the offsite doses were much less than guideline values or protective action guides as promulgated by the Environmental Protection Agency.

The Commission in its rulemaking proceeding has proposed a plume exposure pathway Emergency Planning Zone (EPZ) of 10 miles as an appropriate distance. If one accepts this as a policy determination as based upon the defense-in-depth philosophy, a large conservatism is introduced in the process.

In planning for contingencies within the EPZ it must be recognized that the State and/or local agencies have the responsibility for taking actions to protect its citizens. Initiation of protective measures such as an evacuation are the responsibility of cognizant State and/or local officials; any dilution of the response authority or implication that the utility also has that responsibility is a disservice to the cognizant public officials. The utility does have, as it properly should, the responsibility to promptly inform and to advise the designated cognizant public officials of any event which could affect the health and safety of the public. In its advisory role, the utility should be expected (and required) to provide timely and accurate assessments of incident, but should not be expected to be jointly responsible for administering the activities of the state or local officials.

Timeliness of Emergency Actions

The required extent and rapidity of completing an emergency action in response to a reactor incident is dependent upon a number of variables. The potential consequences from a postulated reactor accident are a function of the type and size of the facility as well as the engineered safety features that are built in to mitigate accidents. In addition, the distance downwind from the reactor and the prevailing winds are important considerations in the evaluation, as is the extent of action that must be taken to protect the individuals. Recognizing that the warning phase is just the first step in the emergency action sequence, specifying in the regulations a limiting time for the warning phase which is independent of all other variables will not contribute to sound emergency planning and is unnecessary and very possibly counterproductive. Uniform requirements and plans in the entire ten mile emergency planning zone are unwarranted; wind direction and distance from the reactor permit varied resource capabilities in the sectors surrounding a facility. For example, uniform alert to all persons within 10 miles could trigger an evacuation causing traffic jams, where a more orderly limited phased alerting process would be significantly more effective. A more rapid general alert would be indicated close in to the plant only and as one moves away from the

plant an orderly phased alerting system such as one keyed to actual data from the facility or from onsite or offsite monitoring stations or units is necessary.

As part of our proposed rulemaking FEMA must be given guidance on the required speed for action as a function of distance from the plant; generic guidance can be developed for FEMA's guidance based upon the size, type and nature of equipment installed in a plant. There have been a number of such generic studies already completed that provide time to release of radioactivity and estimates of potential doses for a large spectrum of accidents. We believe developing this information into a Regulatory Guide (or comparable document fitting FEMA procedures) to be much preferable to arbitrarily selecting and specifying a time for the warning phase to the exclusion of all other relevant parameters. Since FEMA has been given overall responsibility for the implementation of offsite emergency actions, we believe it inappropriate that the NRC, through regulations on utility operators, usurp that agency's responsibility by its arbitrary and capricious action.

Conclusion

Based on the foregoing we conclude that the NRC regulations pertaining to notification requirement of licensees should state:

"Administrative and physical means, and the time requirements for notifying Federal, State and local officials for warning of the public for evacuation or other protective measures shall be described."