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August 31, 1979

Mr. Joseph Hendrie, Chairman
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Chairman Hendrie:

Yankee is an organization with which you and your staff are familiar. Your staff has interfaced with us continuously over our twenty-five calendar years of nuclear plant design, construction, and licensing work which includes nearly thirty-five reactor years of highly successful operation of four nuclear plants.

One of the many areas involved in this accumulated experience has been radiological emergency planning. For each of our plants, during their initial stages of design and licensing, we initiated preparations for emergency plans which were carried forward to what became complete plans prior to initial plant criticality. These plans and our involvement with them have been extensive since then, since effective plans require continuous scrutiny and exercising. This is especially true of off-site radiological assessment and protective action and the interface arrangement established between the plant operator and the appropriate state and local public health and emergency response authorities.

Emergency plans in general and this interface feature specifically have recently been the subject of very intense scrutiny, as you are well aware. Yankee shares the considerable concern for the problems regarding existing emergency plans identified during and following the Three Mile Island accident. We are working and will continue to work on addressing these real concerns. We feel strongly, however, that our efforts, those of the nuclear industry, and those of the state, county and local officials with emergency plan responsibilities, should not be impaired and diluted by confusion or by other than truly necessary and appropriate requirements. You are probably aware that the legitimate concerns have given rise to a proliferation of new approaches, proposed requirements, and threatened dead lines.

In our judgement, a most unfortunate recent example of overreaction was provided recently by members of your staff as manifested in the enclosure to this letter. The new acceptance criteria for nuclear plant emergency plans delineated therein were identified to licensees throughout the country in regional meetings held during the week of August 20, 1979. They were stated to be immediately

applicable to licensee, state and local radiological emergency plans and will be audited within a few months during review of these plans by the newly formed NRC Emergency Plan Review Task Force.

The staff representatives presenting this material indicated that the need for these new acceptance criteria stems from the requirements identified in U. S. Senate Bill S.562 which requires NRC concurrence in state radiological emergency plans by June 1, 1980. According to the Bill, plants without such concurrence by that time must shut down until concurrence is achieved. Even assuming that this Senate Bill ultimately becomes law, it does not contain or require a new basis for NRC concurrence. It simply requires concurrence and mentions the basis existing on July 16, 1979. Furthermore, the Senate Bill addresses only NRC concurrence in state/local plans, but the attached criteria specifically address licensee plans as well.

Finally, however, our greatest concern stems from the fact that many of the new requirements - addressing both the licensee and state/local plans - appear to be of questionable merit, without clear cut criteria, and -- above all -- are being imposed as immediately effective without benefit of the established processes normally and necessarily associated with the development of regulatory requirements.

As one outstanding example of the cart before the horse syndrome described above the NRC is in the midst of a public comment period leading to rule making procedures on key emergency plan issues many of which will directly affect the criteria listed in the attached document.

In our judgement such precipitate and ad hoc action by the NRC staff can only further exacerbate controversy and confusion in the difficult and crucial area of emergency planning, while what is obviously required is the best and most reasoned and rational approach possible. We urge prompt Commission review of this situation and would be pleased to assist in any manner you consider appropriate.

Respectfully,

YANKEE ATOMIC ELECTRIC COMPANY

L. E. Minnick

L. E. Minnick
President

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Enclosure

Emergency Planning Acceptance Criteria for Licensed Nuclear Power Plants

DOCKET NUMBER PROPOSED RULE PR-50 (44 FR 41483)

INTRODUCTION

Licensees will submit updated facility plans either before or after the site visit by the NRR review team, together with the appropriate State and local plans, which will be evaluated collectively against the requirements of Appendix E to 10 CFR Part 50, the positions set forth in Regulatory Guide 1.101, and the acceptance criteria contained herein. The criteria contained herein will be used in conjunction with the aforementioned regulations and guidance to assure that the following emergency planning objectives have been achieved.

(1) Effective coordination of emergency activities among all organizations having a response role.

(2) Early warning and clear instructions to the population-at-risk in the event of a serious radiological emergency.

(3) Continued assessment of actual or potential consequences both onsite and offsite.

(4) Effective implementation of emergency measures in the environs.

(5) Continued maintenance of an adequate state of emergency preparedness.

A model plan is currently being developed by NRC staff to assist licensees in the revision of their plans.

ACCEPTANCE CRITERIA

I. To assure effective coordination of emergency activities among all organizations having a response role

A. Licensee plans will:

1. Provide for an onsite emergency coordinator at all times having the authority and responsibility to initiate any emergency actions within the provisions of the emergency plan, including the exchange of information with authorities responsible for coordinating offsite emergency measures.

2. Provide for the augmentation of the minimum onsite emergency organization within 60 minutes for all classes of emergencies above the "alert" level.

3. Identify and define by means of a block diagram the interfaces between and among the onsite functional areas of emergency activity, licensee headquarters support, local services support, and State and local government response organizations. The above shall include the onsite technical support center and the operational support center as discussed in NUREG-0578.

4. Describe the location, resources, and role of the onsite technical support center in accordance with the position set forth in item 3 of Section 2.2.2.b of Appendix A to NUREG-0578 (e.g. communications with NRC, State emergency operations center, offsite news media; physical accommodations for technical advisors, contractors, etc.; instrumentation; plant drawings).

5. Describe the location, resources, and role of the onsite operational support center in accordance with the position set forth in item 3 of Section 2.2.2.c of Appendix A to NUREG-0578.

6. Provide for the dispatch of a representative to the principal emergency operations center established by the offsite agencies.

B. State/local plans will:

1. Identify authorities responsible for coordinating offsite emergency activities for each of the Emergency Planning Zone disucssed in NUREG-0396.
2. Designate the authority and specific responsibility for each coordinating authority.
3. Describe the concept of operations from the perspective of each official having a coordinating role, including the operational interrelationships of all Federal, State, and local organizations providing emergency support services.
4. Identify the predetermined location of the State emergency operations center to be used for the coordination of all offsite emergency support activities.
5. Describe the communication plan for emergencies, including titles and alternates for both ends of the communication links and the primary and backup means of communication. Where consistent with the agency function, these plans will include:
   a. Provision for prompt and assured activation of the State/local emergency response network.
   b. Provision for administrative control methods for assuring effective coordination and control of Federal, State and local emergency support activities.

c. Provision for communications with contiguous State/local governments within the Emergency Planning Zones.

d. Provision for communications with Federal emergency response organizations.

e. Provision for communications with the nuclear facility, State and/or local emergency operations centers, and field assessment teams.

II. To assure early warning and clear instructions to the population-at-risk in the event of a serious radiological emergency

A. Licensee plans will:

1. Provide an emergency classification scheme as set forth in Regulatory Guide 1.101.

2. Establish specific criteria, including Emergency Action Levels (EAL) as appropriate, for declaring each class of emergency.

a. EALs for declaring a "site emergency" will include instrument readings and system status indications corresponding to an airborne fission product inventory within containment which, if released, could result in offsite doses equivalent to the lower limit of the EPA Protective Action Guides (PAG) for exposure to airborne radioactive materials. Examples will be provided in the model plan.

b. EALs for declaring a "general emergency" will include instrument readings and system status indications corresponding to an airborne fission product inventory

within containment which, if released, could result in offsite doses equivalent to the upper limit of the EPA Protective Action Guides (PAG) for exposure to airborne radioactive materials. Examples will be provided in the model plan.

3. Provide a clear and explicit methodology for relating EALs to PAGs.

4. Identify the onsite capability and resources to properly assess and categorize accidents including:

   a. Instrumentation for detection of inadequate core cooling in accordance with the position set forth in item 3 of Section 2.1.3.b of Appendix A to NUREG-0578.

   b. Radiation monitors in accordance with the position set forth in item 3 of Section 2.1.8.b of Appendix A to NUREG-0578.

5. Provide for recommending protective actions to the appropriate State and local authorities, based on projected dose to the population-at-risk, in accordance with the recommendation set forth in Table 5.2 of the Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA-520/1-75-001. Upon declaration of a "general emergency", <u>immediate</u> notification shall be made <u>directly</u> to the offsite authorities responsible for implementing protective measures within the Emergency Planning Zone as discussed in NUREG-0396.

6. Describe the onsite communications capability for assuring contact with the offsite authorities responsible for implementing protective measures including a primary and backup means of communications.

B. State/local plans will:

1. Identify authorities having a response role within the Emergency Planning Zone as discussed in NUREG-0396.
2. Designate the authority and specific responsibility for each of the responding authorities.
3. Provide for 24 hours/day manning of communication link by authorities responsible for implementing offsite protective measures.
4. Provide an emergency classification scheme that is consistent with that established by the licensee.
5. Describe the resources that will be used if necessary to notify the populace within the Emergency Planning Zone associated with the plume exposure pathway (NUREG-0396) within 15 minutes following notification from the facility operator (e.g. tone alert systems, sirens).
6. Provide for periodic dissemination of educational information to the public within the Emergency Planning Zone regarding the potential warning methodology, and provisions for posting such information in areas visited by transients (e.g. recreational areas).
7. Identify prewritten emergency messages for response organizations and the public consistent with the classification [illegible].

8. Provisions for testing the overall communications link to assure that the criteria specified in item 5 above is met on a continuing basis.

III. To assure continued assessment of actual or potential consequences both onsite and offsite

A. Licensee plans will:

1. Identify the onsite capability and resources to provide valid and continuing assessment throughout the course of an accident including:

a. Post-accident sampling capability in accordance with the position set forth in item 3 of Section 2.1.8.a of Appendix A to NUREG-0578.

b. In-plant iodine instrumentation in accordance with the position set forth in item 3 of Section 2.1.8.c of Appendix A to NUREG-0578.

c. Plots showing the containment radiation monitor reading vs. time following an accident for incidents involving 100% release of coolant activity, 100% release of gap activity, 1% release of fuel inventory, and 10% release of fuel inventory. Example plots will be provided in the model plan.

2. Identify the capability and resources for field monitoring in the environs of the plant including the additional dosimetry specified in the revised technical position issued by the NRC Radiological Assessment Branch for the environmental radiological monitoring program.

B. State/local plans will:

1. Identify the agencies having a radiological assessment role within the Emergency Planning Zone as discussed in NUREG-0396, including the lead agency for data coordination.
2. Designate the specific responsibilities for each agency having an assigned assessment role.
3. Describe the arrangements established with the Department of Energy Regional Coordinating Office for radiological assistance under the RAP and IRAP programs.
4. Designate a centralized coordination center for the receipt and analysis of all field monitoring data.
5. Describe the methods and equipment to be employed in determining the magnitude and locations of any radiological hazards following liquid or gaseous radioactivity releases.

IV. To assure effective implementation of emergency measures in the environs

A. Licensee plans will:

1. Provide written agreements with each Federal, State, and local agency and other support organizations having an emergency response role within the Emergency Planning Zone as discussed in NUREG-0396. The agreements will identify the emergency measures to be provided and the mutually acceptable criteria for their implementation.

B. State/local plans will:

1. Designate protective action guides and/or other criteria to be used for initiating specific protective actions

in accordance with the recommendations of EPA regarding exposure to a radioactive gaseous plume (EPA-520/1-75-001) and with those of HEW/FDA regarding radioactive contamination of human food and animal feeds as published in the Federal Register of December 15, 1978 (43 FR 58790).

2. Designate the informational needs (e.g. dose rates, projected dose levels, contamination levels, airborne or waterborne activity levels) for implementing the protective actions identified in item 1 above.

3. Describe the evacuation plan and/or other protective measures for the Emergency Planning Zone associated with the plume exposure pathway (NUREG-0396) including:

   a. Maps showing evacuation routes as well as relocation and shelter areas.

   b. Population and their distribution around the nuclear facility.

   c. Means for notification of all segments of the transient and resident population.

   d. Plans for protecting those persons whose mobility may be impaired due to such factors as institutional confinement.

   e. Provisions for the use of radioprotective drugs, including that for emergency workers.

   f. Means of effecting relocation.

   g. Potential egress routes and their projected traffic capacities under emergency use.

h. Potential impediments to use of egress routes, and potential contingency measures.

4. Describe the protective measures to be used for the Emergency Planning Zone associated with the ingestion pathway (NUREG -0396) including the methods for protecting the public from consumption of contaminated foodstuffs.

5. Provide for maintaining dose records of all potentially exposed emergency workers involved in response activities.

V. To assure continued maintenance of an adequate state of emergency preparedness

A. Licensee plans will:

1. Provide, in addition to the drills and exercises identified in Regulatory Guide 1.101, a joint exercise involving the entire Federal, State, and local response organizations. The scope of such an exercise should test as much of the emergency plans as is reasonably achievable without involving full public participation. Definitive performance criteria will be established for all levels of participation to assure an objective evaluation. This joint test exercise will be scheduled about once every five years.

B. State/local plans will:

1. Provide for emergency drills and exercises to test and evaluate the response role of the agency, including provisions for critique by qualified observers.

2. Provide for participation in the joint Federal, State, local and licensee [illegible] drills.

3. Describe the training program for those individuals having an emergency response assignment.

4. Provide for periodic review and updating of the emergency response plans of the agency.