APR 16 1984

Docket No. 410

Mr. Gerald K. Rhode
Niagara Mohawk Power Corporation
300 Erie Boulevard WEst
Syracuse, New York 13202

Dear Mr. Rhode:

We have completed our review of the Nine Mile Point Nuclear Station Emergency Plan submitted December 1982. Your plan was reviewed against the requirements of 10 CFR 50.47(b) and Appendix E thereto and the guidance criteria set forth in "Criteria for Preparation and Evaluation of Radiological Emergency Plans and Preparedness in Support of Nuclear Power Plants", NUREG-0654/FEMA-REP-1, Revision 1, November 1980. This guidance document addresses the standards set forth in the emergency planning regulations of 10 CFR 50.47 and has been endorsed as Regulatory Guide 1.101 (Revision 2), "Emergency Planning for Nuclear Power Plants".

Our review has indicated that additional information and commitments are required before we can conclude that your onsite emergency preparedness program meets these criteria. Enclosed are our comments for which resolution is necessary. Your plan should be revised to address these comments and a revised plan should be submitted within 60 days of your receipt of this letter.

As stated in paragraph 50.47(a)(2), the NRC will base its findings on a review of the Federal Emergency Management Agency (FEMA) findings and determinations as to whether State and local emergency plans are adequate and capable of being implemented, and on its assessment as to whether the applicant's onsite emergency plans are adequate and capable of being implemented. In addition, an emergency response exercise which includes participation of State and local governments, to the extent feasible for the Nine Mile Point site, should be conducted before operation above 5% of rated power.

Any questions concerning the Enclosure should be directed to the licensing project manager, Mary F. Haughey, at (301) 492-7897.

Sincerely,

Original signed by

A. Schwencer, Chief
Licensing Branch #2
Division of Licensing

Enclosure:
Review Comments

cc: See next page

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ENCLOSURE 1

REVIEW COMMENTS ON NINE MILE POINT UNIT 2
EMERGENCY PLAN

The following comments apply to the Nine Mile Point Unit 2 Emergency Plan (hereinafter called the plan), and identify in parentheses the applicable evaluation criteria of NUREG-0654/FEMA-REP-1, Rev. 1 (Regulatory Guide 1.101 Revision 2).

A. ASSIGNMENT OF RESPONSIBILITY

The letters of agreement in Appendix A are dated around December 1981 to January 1982. These letters should be reviewed and certified for currency. (A.3) P.4)

B. ONSITE EMERGENCY ORGANIZATION

There is a discrepancy between Fig. 5.3 of the plan and Table B-1 of NUREG-0654 for onshift staffing. Fig. 5.3 lists six people covering fourteen functional positions, versus ten people covering seventeen functional positions in Table B-1. There also appears to be a discrepancy between Fig. 5.3 of the plan and the narrative in paragraph 5.1 of the plan for onshift staffing; paragraph 5.1 lists thirteen people, versus six people in Fig. 5.3. Revise onshift staffing to more closely reflect the guidance of Table B-1 of NUREG-0654. (B.5; NUREG-0737, Sup. No. 1, Table 2).

C. EMERGENCY RESPONSE SUPPORT AND RESOURCES

The plan does not identify approximate arrival times of Federal agencies should they be requested during an emergency. (C.1.b) The plan should be revised to include this information.

D. EMERGENCY CLASSIFICATION SYSTEM

See Appendix 1 to this enclosure for comments on the emergency classification system.

E. NOTIFICATION METHODS AND PROCEDURES

10 CFR 50, Appendix E, Section IV.D, specifies that State/local officials have the capability to make a public notification decision promptly (within about 15 minutes) on being informed by the plant operator of an emergency condition. Describe the provisions in the offsite plans and procedures for the Nine Mile Point facility which demonstrate that the offsite officials have the capability to meet this design objective. (E.6).

H. EMERGENCY FACILITIES AND EQUIPMENT

Provide additional information to indicate the conformance of the Emergency Operations Facility with the requirements of Table 1 of Supplement No. 1 to NUREG-0737.

I. ACCIDENT ASSESSMENT

1. The plan contains a plot of containment radiation level/source term versus time for a source term inventory for Unit 1. Provide sufficient detail to correlate this information with Unit 2 or provide a similar plot for Unit 2.

2. The containment high range radiation monitor is a fundamental indicator of plant/core conditions. Readings from these monitors should be used as part of the emergency classification and action level scheme, in particular as an indicator of extensive core damage that would be associated with General Emergencies and the need for offsite protective actions. However, unless the relationship of the containment monitor readings to a range of core conditions has been predetermined, they would provide little useful information. A review of your emergency plan and procedures indicates that such information has not been provided. Therefore, we request that you provide the relationship of the containment high range radiation monitor readings for Nine Mile Point to the radioactivity uniformly dispersed in the containment atmosphere for a range of degraded core condition source terms such as 100% coolant activity, 20% and 100% gap activity, and 10% meltdown release fraction. Selected values from this relationship should be used as emergency action levels (EALs) to categorize the severity of a radiological incident.

3. Describe the means for relating field contamination levels to dose rates for key isotopes as listed in Table 3 of NUREG-0654.

J. PROTECTIVE RESPONSE

1. The means and time required to warn or advise transients who may be inside the controlled area is not specifically addressed. (J. 1.d) This information should be included in the site emergency plan.

2. Provide evacuation Time Estimates for the ten mile EPZ, using the guidance provided in Appendix 4 of NUREG-0654. (J.8)

3. The plan fails to include information on the protection factors expected from local residential units or other facilities in case evacuation is impractical. This information should be included in the emergency plan. (J. 10.m)

K. RADIOLOGICAL EXPOSURE CONTROL

The plan does not specificlly indicate if provisions have been made for decontamination of evacuated onsite personnel who may have skin contaminated with radioiodine. In Section 7.4.4 of the plan reference is made to Emergency Plan Implementing Procedure EPP-15. This procedures should be provided for review. (K.7)

M. RECOVERY AND RE-ENTRY PLANNING AND POST-ACCIDENT OPERATIONS

The plan does not establish a method for periodically estimating total population exposure. This method should be identified and described in the emergency plan. (M.4)

APPENDIX 1
Comments on Planning Standard D
Emergency Classification System

The emergency plans for nuclear power reactors are required by 10 CFR 50.47 (b) to have a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters. As specified in 10 CFR 50, Appendix E, Section IV, and NUREG-0654/FEMA-REP-1, Revision 1, emergency action levels (EALs) are observable and measureable indicators of plant status and are based not only on onsite and offsite radiation monitoring information but also on readings from a number of sensors that can indicate a potential emergency. Containment pressure and the response of safety injection systems are examples to consider.

The EALs are presented in Section 4.0 of the site emergency plan, dated December 1982. A review of these EALs indicates that, in general, more emphasis should be placed on using indicators of plant condition (core, containment, and engineered safety features) to initiate predetermined protective action recommendations for severe core damage events. Attachment 1 to this enclosure depicts the decision making process specified in Appendix 1 of NUREG-0654 and was transmitted to the applicant as IE Information Notice 83-28 dated May 4, 1983. The EALs on which the decisions are made should be clearly identified in the emergency plan and procedures. Provide a discussion of how IE Information Notice 83-28 has been incorporated into the NMPNS emergency classification system.

Provide responses as requested to the following comments on the emergency classification system, or provide a justification for not performing each of the actions requested:

Unusual Event

Initiating Condition 5 (Exceeding primary system leak rate). List EALs that include the instrumentation or parameters that would be used to evaluate the reactor coolant system leakage. These EALs should consider leakage inside of primary containment such as "drywell floor drain sump high leak alarm" or "excessive drywell equipment drain sump pump running times," as well leakage outside of primary containment with EALs based on reactor building equipment drain and floor drain sump level.

Initiating Condition 8 (Loss of containment integrity). List the applicable technical specifications in the EAL set, concerning such things as air locks or isolation valves, etc.

Initiating Condition 9 (Loss of engineered safety feature). List the applicable technical specifications.

Initiating Condition 10 (Fire within plant). Change the EAL to state that "communication to the Shift Supervisor that a fire lasting longer than 10 minutes is occurring." The Shift Supervisor has the responsibility for declaring the emergency. An EAL referencing fire detection instrumentation should also be included.

Initiating Condition 12 (Security threat). State that the security threat will be communicated to the Shift Supervisor who has the responsibility for declaring the Unusual Event.

Initiating Condition 13b (Flood, low water). List the usual high and low lake water levels that would initiate declaration of an Unusual Event.

Initiating Condition 15 (Other plant conditions). Add "Shift Supervisor's opinion that" to the beginning of EAL.

ALERT

Initating Condition 4 Address in more detail a steam line break or an MSIV malfunction causing significant leakage.

Initiating Condition 5 (Primary coolant greater than 50 gpm). List the instrumentation or parameters used in indicating the rate of use or integrator readings for reactor coolant leakage. The EALs should cover leakage inside and outside of containment such as will "excessive drywell equipment drain pump running times" or "a trip of the reactor water cleanup system leak monitor."

Initiating Condition 9 Address this condition.

Initiating Condition 10 This EAL set is not conservative in that any of the conditions listed is sufficient cause to declare an alert. EAL set should be ORed instead of ANDed.

Initiating Conditions 12 (Fuel damage accident). The second EAL should specify how a release of radioactivity to the reactor building will be indicated (ie, add "as indicated by a high alarm or radiation monitor(s)")

Initiating Condition 17b (Flood, low water). List the lake water design levels (high and low) that would initiate declaration of an Alert.

Initiating Condition 19 (Other plant conditions). Add "Shift Supervisor's Opinion that" to the beginning of EAL.

Site Area Emergency

Initiating Condition 1 (Known LOCA greater than makeup pump capacity). The EAL set is not conservative in that all the stated EALs must be met before declaring a Site Area Emergency. Revise this EAL set. The EAL "maintain steamline isolation valve closure" is not necessary and should be dropped.

Initiating Condition 2 Address this condition.

Initiating Condition 4 (BWR steam line break). The listed EALs should be "ORed". Include a "failure of MSIVs to close" EAL to adequately address this NUREG-0654 initiating condition.

Initiating Condition 8 (Complete loss of any function needed for plant hot shutdown). The EAL set does not adequately consider the minimum number of components that must be available to achieve hot shutdown, nor the methods available to do so. Revise this EAL set to include this information.

Initiating Condition 11 (Fire compromising the function of safety systems). Any fire compromising the function of a safety system is reason for declaring a Site Area Emergency. It does not have to be a safety system required for shutdown as the EAL states. Revise this EAL.

Initiating Condition 15b (Flood, low water). List the high and low lake water design levels that would initiate declaration of a Site Area Emergency.

Initiating Condition 17 (Other plant conditions). The applicant should add "Shift Supervisor's opinion that" to the beginning of the EAL.

Initiating Condition 18 (Evacuation of Control Room). An adequate EAL or indication that this initiating condition is occurring is the "Shift Supervisor's opinion" as the Shift Supervisor has the responsibility for declaring the Site Area Emergency.

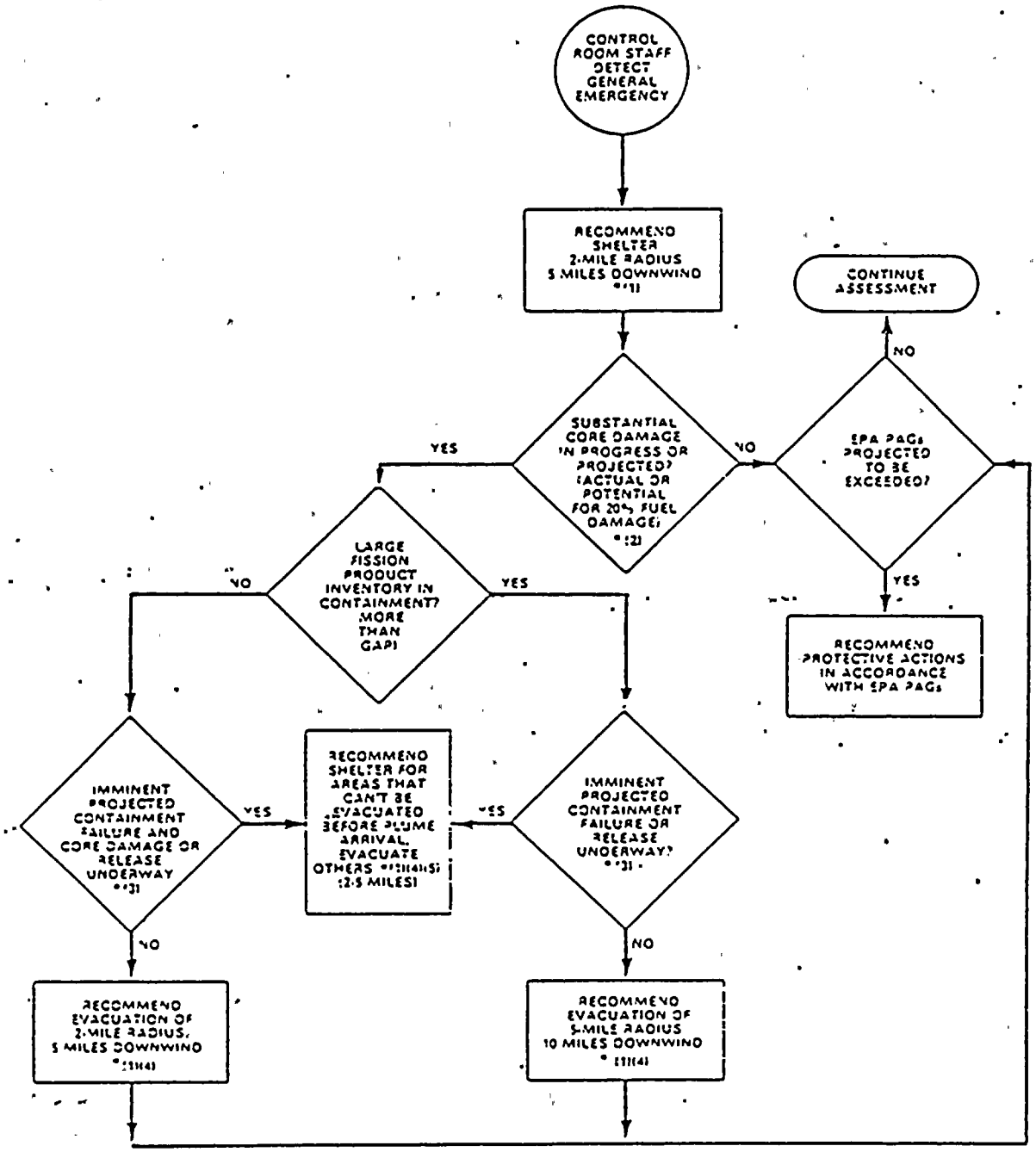
General Emergency

Initiating Conditions 1, 2, 3, 4, 6, & 7 The applicant does not have adequate EALs for any of the applicable NUREG-0654, Appendix 1 General Emergency Initiating Conditions. It is suggested that the applicant refer to the flowchart in Attachment 1 for guidance in developing appropriate protective action decisions.

FIGURE 1

FLOW CHART FOR GENERAL EMERGENCY OFFSITE PROTECTIVE DECISIONS

The following actions will be based on predetermined observable instrumentation and plant status indicators (EALs) contained in the emergency plan and that have been reviewed by offsite officials. However, responsible offsite officials must decide on the feasibility of implementing the protective actions at the time of the accident.



SOURCE Appendix 1 NUREG-0654/FEMA-REP-1 Rev 1

*(1) SITUATIONS REQUIRING URGENT ACTION BY OFFSITE OFFICIALS
(Based on Control Room Indicators, No Dose Projections Required)
– 15-Minute Decisionmaking, Activation of Alerting System and EBS Message

*(2) Actual or projected release of 20% gap from core or loss of physical control of the plant to intruders.

*(3) "Puff" release (rate much greater than designed leak rate).

*(4) For all evacuations, shelter the remainder of the plume EPZ and promptly relocate the population affected by any ground contamination following plume passage.

*(5) Concentrate on evacuation of areas near the plant (e.g., may be time to evacuate 3-mile radius and not the 5-mile radius).

Nine Mile Point 2

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