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Local PDR

Docket Nos.: 50-440/441

Mr. Dalwyn R. Davidson Vice President SLewis, ELD System Engineering and Construction The Cleveland Electric Illuminating Company P. O. Box 5000 Cleveland, Ohio 44101

Dear Mr. Davidson:

Subject: Request for Additional Information Re: the Emergency Plan for the Perry Nuclear Power Plant (Units 1 and 2)

The NRC staff has reviewed the Perry Emergency Plan dated May 22, 1981, and your response to the first round of questions in the Plan dated February 15, 1982. It has been concluded that a substantial amount of effort and commitment is required on your part to upgrade the Emergency Plan so that it fully reflects the state of emergency preparedness effected at this stage in the licensing prodess. Enclosure 1 contains the staffs comments in the Plan, indicating its deficiencies and the additional information required.

It is suggested that a meeting be convened in Bethesda to discuss the enclosed comments and to attain a commitment when we might expect you to respond to this request. Please advise the project manager. John J. Stefano ... when such a meeting can be held, within 5 days after receipt of this letter. Your immediate attention to this request is urged and will be most appreciated.

Sincerely,

A. Schwencer, Chief Licensing Branch No. 2 Division of Licensing

Enclosure: As stated

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DATE 8/30/82			 	

NRG FORM 318 (10-80) NRCM 0240

Perry

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COMMENTS ON PERRY NUCLEAR POWER PLANT EMERGENCY PLAN

A. Assignment of Responsibility (Organizational Control)

- Identify the local organizations that are part of the overall response organization and specify their operational role.
- 2. Describe the interrelationships among the emergency response oranizazation for protective action decision making, public alert and notification, radiological consequence assessment, offsite monitoring and coordination of results, and public information. Illustrate these relationships in block diagrams.
- 3. Discuss how the size of the plume exposure pathway Emergency Planning Zone (EPZ) was determined with regard to such factors as demography, topography, land characteristics, access routes, and jurisdictional boundaries. Identify the exact boundaries of the plume exposure pathway EPZ and discuss the differences between the plume expos re pathway EPZ presented in Figure 2-5 of the Emergency Plan with that presented in Figure II-2 of Appendix D to the Emergency Plan.

B. Onsite Emergency Organization

- Clarify the line of succession for the Emergency Coordinator position

 (as defined in NUREG-0654, Criteria B.2 and B.4) and identify the
 specific criteria and timing for higher level officials to assume
 this position. Describe their relation to each other and the re sponsibilities and authority of the Shift Supervisor, the Emergency
 Duty Officer, the Emergency Coordinator, the Perry Plant Department
 Manager, and the Recovery Director. Clearly specify the individual
 responsible for making protective action decisions and recommendations
 to offsite authorities at each point in time as the emergency organization
 is established.
- 2. For each functional area of emergency activity, specify the normal position title (or expertise) and the major emergency tasks to be performed by each member assigned to the emergency organization. The information should be presented in a format similar to Table B-1 of NUREG -0654 and should clearly demonstrate that minimum shift staffing and augmentation criteria will be met for all required functional areas of emergency activity.
- 3. Provide block diagrams which illustrate the interfaces between and among the onsite functional areas of emergency activity, corporate headquarters support, local services support, and State and local government response organizations. Separate diagrams should be

provided for each distinct phase of the activation of the emergency organization; i.e., the initial phase (0-60 minutes), an interim phase if applicable, and the final augmentation phase when the emergency organization is fully established.

D. Emergency Classification System

- Provide emergency action levels (EALs) for each initiating condition specified in Appendix 1 to NUREG-0654. The EALs must be based on observable information such as specific instrument readings or equipment status indicators, in addition to onsite and offsite monitoring. The EALs must include the instrumentation to identify inadequate core cooling, loss of primary coolant boundary, and potential loss of containment from all containment failure modes.
 - Develop provisions within the emergency classification system to make protective actions recommendations based on plant status in addition to recommendations based on projected doses. Include the guidance on protective actions given in Appendix 1 of NUREG-0654, especially the recommendations for General Emergencies.
 - 3. Discuss how the EALs will be integrated into Control Room procedures to demonstrate that a system has been established that will allow the rapid and accurate classification of events and notification of

offsite authorities with a protective action recommendation within 15 minutes after the declaration of an emergency in accordance with 10 CFR 50, Appendix E, Section IV.D.3.

- 4. The EALs in Table 4-2 of the Emergency Plan for design basis accidents should be integrated into the EALs in Table 4-1 so that there is one comprehensive set of EALs for the plant.
- 5. Verify that each state and local organization will establish an emergency classification and action level scheme consistent with PNPP and that each State and local organization will have procedures in place for taking emergency actions which are consistent with the protective actions recommended by the Perry nuclear facility.

E. Notification Methods and Procedures

 Describe the administrative and physical means that have been established for the prompt alerting and notification of the public within the plume exposure pathway Emergency Planning Zone (EPZ). Sufficient detail should be provided to allow for evaluation against the criteria given in Appendix 3 to NUREG-C654.

- 2. Provide a complete description in the Emergency Plan of the protective action decision making process to demonstrate (1) that plant personnel have the capability to notify State and local governmental agencies within 15 minutes after declaring an emergency, and (2) State/local officials have the capability on a 24-hour per day basis to make a public notification decision promptly on being informed by plant personnel of an emergency condition and that initial notification of the public within the plume exposure pathway EPZ can be essentially completed within 15 minutes for situations requiring urgent action, in accordance with 10 CFR 50, Appendix E, Section IV.D.3.
- 3. Establish the contents of initial and followup emergency messages to be sent from the plant to offsite authorities. The form and content of the initial message should be consistent with the 15 minute notification criteria of 10 CFR 50, Appendix E, Section IV.D.3 whereas followup messages should contain more detailed information such as given in Criterion E.4 of NUREG-0654. The initial emergency notification messages should provide for recommending protective actions based on plant status in addition to recommendations based on projected doses and should incorporate the guidance on protective actions and distances given in Appendix 1 of NUREG-0654 for General Emergencies.

F. Emergency Communications

 Describe the primary and backup communication systems for those emergency response agencies and individuals involved in protection action decision making and implementation. The backup communication systems should be capable of functioning if the telephone system and normal power are lost.

G. Public Education and Information

- Describe the emergency information material that will be made available to the public on a periodic basis regarding how they will be notified and what their actions should be in an emergency. Discuss the provisions of information specified in NUREG-0654, Criterion G.1. Provide actual samples of the public information material.
- Specify the means for disseminating emergency information to the permanent and transient population within the plume exposure pathway EPZ.

- H. Emergency Facility and Equipment
 - Provide sufficient information to demonstrate that the Technical Support Center, Operations Support Center, and Emergency Operations Facility are compatible with the guidance of NUREG-0696. A schedule should be submitted showing when the fundamental requirements for these Emergency Response Facilities (ERFs) will be completed.
 - Discuss the activitation and staffing of the ERFs and the transfer of responsibility for the various emergency response functions from the Control Room to the TSC, OSC, and EOF as a function of time.
 - Identify the onsite radiological, process, geophysical and other monitors which are relied upon as emergency action level indicators.
 Provide instrument identification, readout location, and range.
 - 4. Describe the offsite radiological monitoring system in sufficient detail to establish that it meets the requirements of NRC Radiological Assessment Branch Technical Position for the Environmental Radiological Monitoring Program.
 - 5. Identify and describe the meteorological measurement methods, systems, and equipment that are utilized to assess the transport and diffussion characteristics of air borne releases. Identify the measures that will be taken to assure the availability of the basic meteorological information characteristics of the site in the event the primary system is unavailable.

- 6. Provide the technical bases of the dose calulational methodology that will utilize real-time meteorological information and a Class A transport and diffussion model (as described in NUREG-0654, Appendix 2) to assess the impact of air borne releases in the event of a radiological emergency condition.
- Identify the means for remote integration of the systems that provide meteorological data and effluent transport and diffusion estimates.

I. Accident Assessment

- Describe the onsite capability to provide initial accident related values and continuing assessment chroughout the course of an accident in accordance with NUREG-0737 items II.B.3 (post-accident sampling), II.F.1 (accident monitoring), and III.D.3.3 (inplant radiation monitoring) as they relate to emergency response.
- 2. Provide for relating the containment source term to offsite doses based on containment leakage including plots which show the containment radiation monitor reading versus time following an accident for release of gap activity and increasing percentages of fuel inventory. This information should be used as the basis for EALs.

- 3. Provide a method for relating effluent monitor readings to offsite doses under various conditions which may be used by shift personnel before senior radiological expertise is available onsite or as a backup means of dose calculation capability.
- 4. Provide a complete detailed description of the Emergency Dose Projection System including assumptions, models and technical bases sufficient to clearly establish the relationship between effluent monitor readings, the magnitude of releases, onsite and offsite exposures, and contamination levels for various meteorological conditions.
- Describe the methodology for determining release rates and projected doses if the instrumentation used for assessment including the containment monitor are offscale or become inoperable.

J. Protective Response

 Describe in detail the mechanism or system for advising the public of what measures to take in an emergency beginning with the realization that an emergency has occurred at the plant and continuing with the protective action decision making chain to the point where the public is alerted and notified, in accordance with the requirements of 10 CFR 50, Appendix E, Section IV.D.3. Protective action recommendations to offsite authorities should be based on plant (core/containment) conditions as well as projected doses. This system should use the key-hole approach (i.e., protective actions not limited to only the downwind direction) and follow the guidance of NUREG-0654, Appendix 1, in particular the recommendations on evacuation and sheltering distances for general emergencies. This system should be discussed with State and local officials.

- Describe the bases or criteria for the choice of recommended protective actions including a discussion of how evacuation time estimates and shelter protection factors are incorporated into the protective action decision making process.
- 3. Provide an analysis or additional support for the assumption in the evacuation time estimate study that the transient population will evacuate early and not impact on the balance of the evacuating population.
- Provide data on roadway capacities and characteristics in a format similar to Table 1 of Appendix 4 in NUREG-0654.

- K. Radiological Exposure Control
 - Descirbe how the onsite emergency radiation protection program will differ from the normal program including the use of high range instruments, awareness of a different spectrum of nuclides and energies, higher dose rates, respiratory protection, emergency radiation work permits, and authorization on off-normal shifts to exceed 10 CFR 20 dose limits.
- L. Medical and Public Health Support
 - Describe the arrangements for a backup hospital and medical services with the capability for handling and treating contaminated individuals.

- M. Recovery and Reentry Planning and Postaccident Operations
 - 1. Describe the recovery organization, identifying the major functional activities within the organization, the normal and emergency titles of the persons filling the positions, the criteria for downgrading the level of emergency, and the decision making process. Provide a block diagram illustrating the recovery organization.

- O. Radiological Emergency Response Training
 - Describe how plant and corporate personnel who function as emergency coordinators and are responsible for making protective action recommendations will be trained for this position including developing recommendations based on plant (core/containment) conditions as well as projected doses, using protective action guides, selecting the optimum protective action strategy, and interfacing with the offsite decision making process.

- P. Responsibility for the Planning Effort : Development, Perodic Review and Distribution of Emergency Plans
 - Discuss the arrangements for an independent review of the emergency preparedness program at least every 12 months as specified in 10
 CFR 50.54(t).
 - Discuss the responsibilities for emergency preparedness at the Coroprate level including the development of a Corporate emergency plan.
 - Provide a cross-reference between the Emergency Plan and the criteria of NUREG-0654.

In addition to the above comments, responses to the comments listed below, which were forwarded on December 21, 1981, your responses provided on February 15, 1982, were found to be inadequate, incomplete, or left open (the question numbers correspond to those in the December 21, 1981, letter):

A.1.c	F.1	I.6
A.1.e	F.1.a	I.7
A.3	· F.1.b	I.10
A.4	F.1.c	J.2
B.3	F.1.d	J.6
B.7	F.1.f	K.2
B.8	F.2	L.1
C.1.b	G.3.a	L.3
C.2.b	G.4.b	M.4
C.3	G.5	P.5
C.4	Н.1	
D.1	Н.4	
D.3	H.9	
E.1	I.1	
E.2	1.2	
E.6	I.3	
E.7	I.4	