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SEPTEMBER 19 1980

Docket Nos. 50-315  
and 50-316

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*R. VanNeil*

Mr. John Dolan, Vice President  
Indiana and Michigan Electric Company  
Post Office Box 18  
Bowling Green Station  
New York, New York 10004

Dear Mr. Dolan:

As a result of our review of your proposed Donald C. Cook Nuclear Plant Emergency Plan dated November 9, 1979, we find that we require additional information. The specific information required is listed in the enclosure.

The plan was reviewed against the criteria set forth in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." Please revise your proposed emergency plan in accordance with the information request and resubmit the plan within 60 days of receipt of this letter.

Sincerely,

Original signed by:  
S. A. Varga

Steven A. Varga, Chief  
Operating Reactors Branch #1  
Division of Licensing

Enclosure:  
Request for Additional  
Information

cc: w/enclosure  
See next page

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OFFICE	DL:ORB1	DL:ORB1				
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DATE	09/18/80	09/18/80				

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

September 19, 1980

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and 50-316

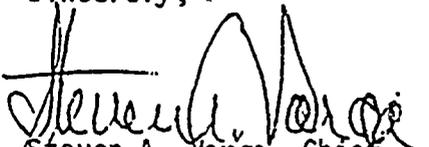
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Division of Licensing

Enclosure:  
Request for Additional  
Information

cc: w/enclosure  
See next page

Mr. John Dolan  
Indiana and Michigan Electric Company - 2 -

September 19, 1980

cc: Mr. Robert W. Jurgensen  
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William J. Scanlon, Esquire  
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Ann Arbor, Michigan 48103

ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION

DONALD COOK NUCLEAR PLANT EMERGENCY PLAN

DOCKET NOS. 50-315 AND 50-316

1. The D.C. Cook Emergency plan does not clearly state by title who is in overall charge of the emergency response, but states only general responsibilities and interfaces. Revise the plan to clearly state the specific individual in charge of emergency response.
2. Your plan does not clearly state which individuals will assume key positions in your emergency organization (with exception of the Plant Operations Manager position assumed by the plant manager). Prior assignment of these key individuals is necessary to ensure proper training and assumption of key functions in a timely fashion. Therefore, revise the plan to clearly state which individuals will assume key positions in your emergency organization.
3. Specify the onsite emergency organization of plant staff personnel for all shifts and its relation to the responsibilities and duties of the normal staff complement.
4. The Shift Operating Engineer, who is responsible for initiation of the emergency plan does not have the authority to provide protective action recommendations to those responsible for implementing offsite emergency actions. This is contrary to NUREG-0654, Section II.B.2. Revise your plan so that a designated individual who is on site at all times has authority to make such protective action recommendations.

5. Provide a line of succession for the emergency coordinator in terms of specific title or position as well as the specific conditions for higher level utility officials assuming this function.
6. The plant manager, according to your plan, assumes the role as Plant Operations Manager in the emergency organization, and reports to the Technical Support Manager, who in turn reports to the Recovery and Control Manager. The plant manager who is apparently two echlons down in the emergency chain of command is the individual designated to make protective action recommendation. NUREG 0654 states that responsibility to make such recommendations is one of those non-delegable responsibilities of the emergency coordinator. Revise your plan so that it is clear who will function as the emergency coordinator and what his responsibilities are.
7. Specify the positions or title and qualifications to be met by the persons to be assigned to the functional areas of emergency activity. For emergency situations, specific assignments shall be made for all shifts and for plant staff, both onsite and away from the site. These assignments shall cover emergency functions in NUREG-0654, TABLE B-1, entitled "Minimum Staffing Requirements for Nuclear Power Plant Emergencies." The minimum capabilities and staffing on-shift and available within one-half hour following declaration of the emergency class shall be as indicated in the aforementioned table.
8. Describe the framework for long term augmentation of your emergency organization. The Recovery Organization recommended by the Atomic

Industrial Forum in their document "Nuclear Power Plant Emergency Response Plan" dated October 11, 1979, provides an acceptable framework.

9. Specify the corporate management, administrative, and technical support personnel who will augment the plant staff as specified in Table B-1 of NUREG-0654 and in the following areas:
  - a. logistics support for emergency personnel (e.g. transportation, temporary quarters, food and water, sanitary facilities in the field, and special equipment and supplies procurement)
  - b. technical support for planning and re-entry/recover operations
  - c. management level interface with governmental authorities
  - d. release of information to news media.

Your plan currently contains an emergency organization which addresses some of the functions listed above; however, it does not show evidence of prior planning and assignment of personnel designated to perform these functions. Revise your plan so that it is clear which corporate management, administrative, and technical support personnel will augment the plant staff during the emergency and subsequent recovery.

10. Specify the service to be provided by local firefighting and ambulance services. Include provisions in you plan for the operator to provide for transportation of injured personnel who may also be contaminated.

11. Include in your plan, letters of agreement or arrangements reached with contractor, private, and local support arrangements. The agreements shall delineate the authorities, responsibilities, and limits on the actions of these organizations.
12. A description of the arrangements with the Chicago DOE Office for RAP/IRAP assistance including those RAP/IRAP resources relied upon in your emergency planning should be specified in your plan.
13. Clarify your plan with respect to dispatching a representative to principal offsite governmental emergency operations centers.
14. Identify the radiological laboratories, their capabilities and expected response times, which can be used in an emergency.
15. Expand the conditions which will be used to declare each of the four emergency categories and include all of the applicable example initiating conditions set forth in NUREG-0610 and all postulated accidents in the Final Safety Analysis Report. Additionally the specific instruments and set points, parameters, or equipment status for establishing the emergency class should be included in the plan.
16. Clarify the authentication procedures used during notification of events with offsite activities. Your plan describes use of a tone generated by the site transceiver. The Berrien County plan discusses authentication using an authentication number transmitted by the site. Insure that your plan reflects mutually agreeable authentication procedures.

17. Provide a standard format for the initial/emergency message to offsite authorities, with the message content based on information requirements of Section II.E of NUREG-0654.

18. The format for your follow-up emergency messages described in Appendix M of your plan does not meet the content requirements of Section II E.4 of NUREG-0654 in that:

a. The format provides for projected dose rate for the 2 mile LPZ but does not report dose rates at 5 and 10 miles.

b. The format does not make provisions for requesting any needed onsite support by offsite organizations.

c. The format does not provide for a prognosis for worsening or termination of the event based on plant information.

Revise your plan to incorporate the above listed information.

19. Establish time requirements for notifying and providing prompt instructions to the public within the plume exposure pathway. These times should be included in the plan. Though it is the responsibility of state or local governments to activate the warning and notification systems, you are responsible for insuring that the physical and administrative means for timely notification exists. Your plan should address the means used to warn the public within the plume exposure EPZ.

20. Discuss messages intended for release to the public in your plan. The information released in these messages should be consistent with your classification scheme.

21. Expand the discussion of your communications systems to include the criteria specified in Section II. F.1 of NUREG-0654. Assure that your communications are consistent with the concept of operations described in Appendix 5 of NUREG-0654 covering the onsite technical support center, the operational support center, the near-site Emergency Operations Facility, field assessment teams and local EOC's.
22. Address your plans and methods for communication with contiguous State/local governments within 50 mile ingestion pathway EPZ as well as the 10 mile plume exposure EPZ.
23. Discuss your provisions for communications with NRC headquarters and NRC Regional Office EOCs and the operator's near-site EOF and radiological monitoring team assembly area.
24. Describe the provisions for testing your communications system.
25. Describe the means to be employed for periodic dissemination of information to the public regarding how they will be notified and what their actions should be in an emergency. This information should include, but not necessarily be limited to:
  - a. educational information on radiation
  - b. contact for additional information

c. respiratory protection

d. sheltering

e. evacuation routes.

Your program to provide information to the public should meet the criteria specified in Section II G. 2 of NUREG-0654.

26. Provide space for the news media at the near-site Emergency Operations Facility.
27. Describe the arrangements for timely exchange of information among designated spokespersons for each organization.
28. Describe your provisions for conducting an annual program to acquaint the news media with the emergency plans, information concerning radiation, and points of contact for release of public information in an emergency.
29. Expand your description of the Technical Support Center, addressing those criteria listed in NUREG-0578 and in the NRC letter to all power reactor licensees dated October 30, 1979.
30. Clarify the intended functions and facilities of your Recovery Center. It is not clear whether or not the Recover center is intended to meet the Emergency Operations Facility (EOF) criteria of NUREG-0654 Section II. H. 2. Insure that your emergency plan incorporates a facility which meets the EOF criteria listed in NUREG-0654 and NUREG 0696.

31. Identify the staffing and time required to activate the near-site Emergency Operations Facility (EOF).
32. Expand your discussion and list of emergency facilities and equipment to identify all of the specific onsite monitoring systems (See Section II. H. 5 of NUREG-0654) that are used to initiate emergency measures in accordance with NUREG-0610. Also identify those instruments or system indicators used for continuing assessment throughout the course of an accident, including post accident sampling capability, radiation and effluent monitors, in-plant iodine instrumentation, and containment radiation monitoring in accordance with NUREG-0578 and as elaborated in the NRC letter to all power reactor licensees dated October 30, 1979.
33. Describe your provisions for off site dosimetry which conform to the NRC Radiological Assessment Branch Technical Position for the Environmental Radiological Monitoring Program (NUREG-0654 Criteria H-6b). Additionally, specify the laboratory facilities (fixed or mobile) and describe the offsite radiological and meteorological monitoring capabilities in the vicinity of your nuclear site.
34. Expand your description of the meteorological instrumentation facilities available to your emergency organization, and the capability to meet the criteria of Appendix 2 to NUREG-0654, including provisions for obtaining representative real-time meteorological information from other sources. Describe the provisions for access to meteorological information from the near-site EOF, Technical Support Center, and an offsite NRC Center.

35. Provide a more complete description of your Operational Staging Area. This area should have adequate capacity, shielding, ventilation, and supply inventory.
36. Describe your provision for emergency equipment/instrument inventory and testing. Insure the minimum criteria of NUREG-0654 II. H. 10, 11 are met.
37. Provide a central point for the receipt and analysis of all field monitoring data, consistent with the role of the near-site Emergency Operations Facility as discussed in NUREG-0654.
38. Identify plant system and effluent parameters characteristic of a spectrum of off-normal conditions and accidents. These observable plant parameter values should correspond to the applicable initiating conditions of NUREG-0610.
39. Confirm that your capability and resources to provide radiological monitoring throughout the course of an accident meet the criteria of NUREG-0578, as elaborated in the NRC letter to all power reactor licensees dated October 30, 1979.
40. Describe the assessment methods and techniques for determining:
  - a. the source term of releases of radioactive material within plant systems.

- b. the magnitude of the release of radioactive materials based on plant system parameters as well as effluent monitors.
  - c. the release rate/projected doses if the instrumentation used for assessment are off-scale or inoperable.
41. Describe your provisions for detecting and measuring radioiodine concentrations in air in the vicinity of the site as low as  $5 \times 10^{-8}$   $\mu\text{Ci/cc}$  under all weather conditions. Interference from the presence of noble gas and background radiation shall not decrease the stated minimum detectable activity.
42. Describe your capability and resources for field monitoring within the plume exposure Emergency Planning Zone including the methods, equipment, and expertise to make rapid assessments of actual or potential magnitude and locations of any radiological hazards through the liquid or gaseous pathways. Your description should address activation criteria, means of notification, field team composition, transportation, communication, monitoring equipment and estimated deployment times.
43. Describe your means for relating the various measured parameters (e.g., contamination levels, water and air activity levels) to dose rates for key isotopes and gross radioactivity measurements. Also describe your provisions for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with protective action guides.

44. Specify the time required to warn or advise onsite individuals not having emergency assignments who may be within the site boundary at the time of an accident.
45. Describe the provisions for the use of radioprotective drugs (e.g., individual thyroid protection) and respiratory protection for onsite personnel.
46. Revise your plan to explicitly provide for recommending protective action to appropriate State and local authorities. These recommendations shall be based on Emergency Action Levels corresponding to projected dose to the population-at-risk in accordance with NUREG-0610 and the recommendations set forth in Table 5.1 of the EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (EPA-510/1-75-001). These recommendations shall be made directly to the offsite authorities having the responsibility for implementing protective action measures within the plume exposure Emergency Planning Zone.
47. Your plan shall contain time estimates for evacuation within plume exposure EPZ in accordance with Appendix 4 of NUREG-0654.
48. Provide the following as a part of your plans to implement protective measures for the plume exposure pathway:
  - a. Maps showing evacuation routes, sectors, relocation centers in host areas, shelter areas, hospital and other medical facilities.

- b. Population distribution around the nuclear facility using the format of Table J-1 of NUREG-0654.
  - c. Description of the means used to notify all segments of the transient population;
  - d. The basis for the choice of recommended protective actions from the plume exposure pathway during emergency conditions. This should include expected local protection afforded in residential units for direct and inhalation exposure as well as evacuation time estimates.
49. Expand your discussion of emergency personnel exposure to include guideline consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides and the activities listed in NUREG-0654 II. K. 1.
50. Expand your description of the radiation protection program implemented during emergencies including the individuals by position or title who can authorize emergency workers to receive doses in excess of of 10CFR 20 limits. Your description should confirm the existance of procedures for permitting onsite volunteers to receive radiation exposures in the course of lifesaving activities, including provisions for expeditious decision making.
51. Describe your provision for 24-hour-per-day capability to determine doses received by emergency personnel, including the provisions for distribution of dosimeters and maintaining dose records.

52. Specify your action levels for determining the need for decontamination.
53. Describe your capability for decontaminating relocated on-site personnel, including provisions for extra clothing and decontaminants suitable for the type of contamination expected.
54. Describe your arrangements for transporting victims of radiological accidents to medical support facilities.
55. Expand your description of recovery operations to confirm that general plans are or will be developed for recovery and re-entry, including the following:
  - a. The means by which decisions are reached to relax both onsite and offsite protective measures.
  - b. The position/title, authority, and responsibilities of individuals who will fill key positions in the facility recovery organization.
  - c. The means for informing members of the response organizations that a recovery operation is to be initiated, and of any changes in the organizational structure that may occur.
  - d. The method for periodically estimating total population exposure.

56. Expand the description of your excercises, insuring that the annual exercise meets the criteria of Section II. N. 1 of NUREG-0654 and that the exercises include periodic participation by Federal response organizations, mobilization of State and local personnel and resources, and a scheduled critique by Federal and State observers.
  
57. Provide for periodic drills which meet the requirements of NUREG-0654, Section II. N. 2 for each of the following:
  - a. Communications Drills
  
  - b. Fire Drills
  
  - c. Medical Emergency Drills
  
  - d. Radiological Monitoring Drills
  
  - e. Health Physics Drills.
  
58. Provide a commitment that the drill and exercise scenarios will include the minimum elements specified in NUREG-0654, Section II. N. 3.
  
59. Provide for the observation and critique of your required drills and exercises by qualified Federal, State, and local organizations. Your organizaton shall identify management controls to insure that corrective actions are implemented to eliminate discrepancies or weaknesses identified during the conduct of drills or exercises.

60. Expand the description and scope of your training program to include the site specific emergency response training of all off-site emergency organizations who may provide assistance during an emergency.

61. Your description of specialized training and retraining programs (including the scope, nature and frequency should provide for training in each of the nine categories in NUREG-0654 Section II.0.4. As appropriate to the category, the following should be included in your program:

a. Qualification and training for onsite emergency personnel should include drills whereby each individual demonstrates his proficiency in performing the assigned function.

b. Training for individuals performing first aid should include courses equivalent to Red Cross Multi-Media.

c. Hospital personnel, ambulance/rescue personnel, police and fire departments should be trained in the procedures for notification, basic radiation protection, and their expected roles.

62. Describe the training provided for and/or the qualifications of, the personnel responsible for your emergency planning effort.

63. Identify by title the individual with overall authority and responsibility for radiological emergency response planning.

64. Designate an Emergency Planning Coordinator having the responsibility for the development and updating of emergency plans, and the coordination of the plans with other response organizations.
65. Provide a commitment for timely distribution of plan revisions to all organizations having responsibility for its implementation.
66. Appendix A of your plan, which list the Emergency Procedures required to implement your plan, should also include the Sections of the plan implemented by each procedure.
67. Provide an index for your plan.
68. Describe the provisions for an independent audit of your emergency preparedness program at least once every two years. The audits should include the emergency plan, its implementing procedures and practices, training, readiness testing, and equipment. Management controls should be implemented for evaluation and correction of audit findings. The result of the audit should be documented, reported to the appropriate organizational management, and retained for a period of five years.