Official Record Copy

APR 22 1985

Carolina Power and Light Company
ATTN: Mr. E. E. Utley
Executive Vice President
Power Supply and Engineering
and Construction
411 Fayetteville Street
Raleigh, NC 27602

Gentlemen:

SUBJECT: REPORT NO. 50-400/85-09

On March 4-15, 1985, NRC inspected activities authorized by NRC Construction Permit No. CPPR-158 for your Shearon Harris facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The findings of this inspection indicate that a deficiency exists in your emergency preparedness program. This is discussed in Appendix A, "Emergency Preparedness Deficiencies." This deficiency identified in Appendix A must be corrected prior to operation above 5% reactor power. You are requested to notify this office in writing as soon as possible after corrective actions for this deficiency have been completed.

This inspection also indicated that there are areas that should be evaluated and considered for improvement in your emergency preparedness program. These areas are discussed in Appendix B, "Emergency Preparedness Improvement Items." We recognize that an explicit regulatory requirement pertaining to each item identified in Appendix B may not currently exist. Notwithstanding this, you are requested to submit a written statement addressing the results of your consideration of each of the items in Appendix B. This statement should be submitted in conjunction with your notification of completion of corrective actions for the deficiencies identified in Appendix A.

During the inspection, several of your program areas were found to be incomplete and could not be evaluated. These areas are listed in Appendix C, "Incomplete Emergency Preparedness Items."

In accordance with 10 CFR 2.790(d) and 10 CFR 73.21, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room unless you notify this office, by telephone, within ten days of the date of this letter and submit written application to withhold information contained therein within thirty days of the date of this letter. Such applications must be consistent with the requirements of 2.790(1).

IE01 1/0

The responses directed by this letter are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Original Signed by
Roger D. Walker

Roger D. Walker, Director
Division of Reactor Projects

Enclosure:
Inspection Report No. 50-400/85-09

cc w/encl:
R. A. Watson, Vice President
Harris Nuclear Project
R. M. Parsons, Project General Manager

bcc w/encl:
NRC Resident Inspector
Document Control Desk
State of North Carolina

RII	RII	RII	RII	RII	RII
RWalker:bhg	TDecker	WEline	DCollins	JPStohr	PFredrickson
04/ /85	04/10/85	04/10/85	04/11/85	04/17/85	04/17/85

RII
DVerrelli
04/17/85

APPENDIX A

EMERGENCY PREPAREDNESS DEFICIENCIES

Based on the results of the NRC's appraisal of the Shearon Harris Nuclear Plant Emergency Preparedness Program conducted March 4-15, 1985, the following deficiency was identified (see Section 5.3 of NRC Report No. 50-400/85-09):

The Unusual Event Matrix of Attachment 1 to PEP-101 is inconsistent with NUREG-0654, Appendix 1, Notification of Unusual Event examples.

APPENDIX B

EMERGENCY PREPAREDNESS IMPROVEMENT ITEMS

Based on the results of the NRC's appraisal of the Shearon Harris Nuclear Power Plant (SHNPP) Emergency Preparedness Program conducted March 4-15, 1985, the following items should be considered for improvement (references are to sections in NRC Report No. 50-400/85-09).

1. Including specific procedural requirement for training on new or modified emergency preparedness (EP) equipment. (3.1)

2. Including a procedural method for training augmentation personnel who may be requested to assist the applicant in the event of an emergency condition. (3.1)

3. Including in the training program specific cautions to emergency personnel regarding safety during unusual plant conditions. (3.1)

4. Placing adequate numbers of plant procedures in the Control Room so that all operators having access requirements may easily accomplish their tasks. (4.1.1)

5. Providing portable radio unit for Operations Support Center (OSC) leaders in the OSC storage cabinets. (4.1.1)

6. Providing status board for tracking repairs, damage, and monitoring teams. (4.1.1)

7. Providing a minimum of one sound-powered phone and cord in the OSC storage cabinet. (4.1.1)

8. Providing dosimeters with a range sufficient to monitor the limits set forth in the emergency plan for emergency workers. (4.1.1)

9. Using consistent terminology for "Site Evacuation" in the plan and procedures. (4.1.1)

10. Providing a written agreement between Carolina Power and Light Company and the National Weather Service (NWS) to document the role of the NWS in emergency response. (4.2.1)

11. Eliminating the reference to mixed-mode release calculations if not applicable, or substantiation of the use of mixed-mode release assumptions (4.2.1)

12. Standardizing the wording and placement in procedures PEP-102 and PEP-103 relating to the specific nondelegable responsibilities of the Site Emergency Coordinator (SEC). (5.1)

13. Including in the SEC nondelegable responsibilities, request for Federal assistance. This responsibility may shift to the Emergency Recovery Manager when the Emergency Operations Facility is activated. (5.3)

14. Completing Attachment 2 to the emergency phone list (PSO-85-002) to include an introduction, names of contact persons for State and local agencies, and NRC phone numbers. Consider providing pager numbers in Attachment 1 when available. (For SHNPP emergency response personnel). (5.4.1)

15. Dating issues of PSO-85-002 so that emergency personnel may make timely reviews and assure themselves that current copies are in use. Consider numbering pages in attachment for easy reference and assurance that all pages are present in the document. (5.4.1)

16. Providing a checklist in PEP-102 to assist the Site Emergency Coordinator in using the procedure (5.4.2)

17. Modifying Attachment 2 to PEP-104 to include a reference to procedure step 9.6 which recommends sheltering for a zone unless the plume is a result of a continuous release of duration greater than the evacuation time for a given zone. (5.4.2)

18. Modifying PEP-104, Paragraph 5.3, to include mention of Attachment 4. (5.4.2)

19. Reviewing Attachment 1 to PEP-104 from a human factors standpoint. (5.4.2)

20. Providing a copy of CRC-828 and the Westinghouse Core Damage Document in the Technical Support Center (TSC) and Emergency Operations Facility (EOF) as reference sources. (5.4.2)

21. Defining frequency of dose projection updates in PEP-216. (5.4.2)

22. Reviewing PEP-207 and PEP-208 with aim of reducing redundancy and confusion. Consider either incorporating PEP-208 into PEP-207, or making PEP-208 a procedure which directs and controls emergency chemistry activities. (5.4.2)

23. Developing a checklist of priorities for support functions. (5.4.3)

24. Developing a checklist of priorities for performing radiological functions. (5.4.3)

25. Reviewing routine procedures that are referenced in PEP-371 for applicability and those which are not applicable be deleted from the reference list. (5.4.3)

26. Incorporating into PEP-406, a provision that defines precisely which manager or director, by title, shall be responsible for corrective actions identified during drills or exercises. Consider identifying in the procedure the method by which deficiencies will be documented and including a system that provides for corrective action deadlines. (5.5.2)

27. Placing administrative checklists in operation for EP unresolved items and recurring requirements to assure timely accomplishment. (5.5.3)

28. Modifying emergency plan to reflect that distribution of Plant Operating Manuals (POM) is in accordance with PGO-014. (5.5.3)

29. Considering engineering design change to include main control board annunciator alarm for the Gross Failed Fuel Detector System (GFFDS). (7.2.1)

30. Preparing off-normal response procedure for alarm on GFFDS. (7.2.1)

31. Ensuring that procedural changes are promptly entered into in-use procedures. (7.2.2)

32. Ensuring that any procedural changes are promptly brought to the attention of the cognizant personnel, and that appropriate training is ultimately conducted. (7.2.2)

33. Demonstrating the capability to perform staff augmentation within applicable time frames with procedures in use or considering acquisition of equipment that will permit such performance. (7.2.3)

34. Conducting additional training for control room personnel as appropriate when all emergency communication circuits are installed. (7.2.3)

APPENDIX C

INCOMPLETE EMERGENCY PREPAREDNESS ITEMS

Based on the results of the NRC's appraisal of the Shearon Harris Nuclear Power Plant Emergency Preparedness Program conducted March 4-15, 1985, the following areas or items within areas were found to be incomplete and could not be appraised (references are to sections in NRC Report No. 50-400/85-09).

1. Completing respiratory protection program training for required personnel. (3.2)

2. Completing necessary and scheduled training for State and local agencies as outlined in SHNPP Emergency Plan Training drill and exercise schedule dated 3/4/85. (3.2)

3. Completing emergency response facility information system (ERFIS) training upon completion and startup of the system. (3.2)

4. Completing training for onsite warning signals, personnel muster/assembly and training for assembly area leaders. (3.2)

5. Completing emergency personnel makeup classes. (3.2)

6. Completing planned walk-through and talk-through training and drills for on-site and off-site support organizations. (3.2)

7. Completing training for augmentation personnel and nonbadged site personnel. (3.2)

8. Completing general employee training (GET) for all personnel on site to be badged to enter the Protected Area. (3.2)

9. Completion of installation and testing of communication systems (4.1.1)

10. Completing installation and testing of accident detection and mitigation equipment, such as the Radiation Monitoring System (RMS), ERFIS, and Main Control Boards. (4.1.1)

11. Completing training and qualification for Control Room Personnel upon all equipment used in the detection, classification, notification, and protective action recommendation preparation, and demonstrating the capability to adequately perform same. (4.1.1)

12. Completing construction items in the TSC such as power systems, ventilation, radiation monitoring, and facility integrity. (4.1.1)

13. Completing installation and testing of communication systems. (4.1.1)

14. Completing stocking of emergency kits and finalizing inventories. (4.1.1)

15. Completing installation/testing of ERFIS and all supporting systems. (4.1.1)

16. Completing training and qualification of Technical Support Center personnel upon all equipment used in the classification, notification, and protective action recommendation preparation, and demonstrating the capability to adequately perform same. (4.1.1)

17. Completing and testing the ERFIS in the EOF. (4.1.1.)

18. Equipping Turbine Building first-aid room and assembling and distributing onsite ambulance kit. (4.1.2)

19. Finishing construction of and equipping the Turbine Building decontamination facility, and equipping the waste processing building and TSC decontamination facilities. (4.1.2)

20. Completing the supplemental procedure PEP-402 to reflect all the emergency equipment and supplies. Supplemental specific information, such as the proposed Plant Special Order 85-014, is needed and should include maintenance responsibilities. (4.2.1)

21. Verifying operability and accuracy of in-plant capabilities for detecting airborne iodine in the presence of noble gases. (4.2.1)

22. Performing operability and calibration procedures after final inventories have been established (4.2.1)

23. Completing installation and testing of area and process radiation monitors. (4.2.1)

24. Completing installation and testing of nonradiation process monitors. (4.2.1.)

25. Completing refill-storage area on the 261 level of the Turbine Building. (4.2.1)

26. Completing the security radio system installation. (4.2.3)

27. Completing the onsite operations radio repeater system. (4.2.3.)

28. Completing the onsite public address system (needs full functional check). (4.2.3)

29. Completing the automatic ring down phone system (additional remote tie-ins). (4.2.3.)

30. Completing final operational testing on all communications systems. (4.2.3)

31. Completing stocking of reserve emergency equipment and supplies. (4.2.5)

32. Completing the emergency alarm and abnormal occurrence procedures. (5.2)

33. Describing in PEP-342 the dose projection method using ERFIS. (5.4.2)

34. Completing offsite radiological survey procedures. (5.4.2)

35. Completing procedures for on-site (out-of-plant) radiological surveys. (5.4.2)

36. Changing section 2.3 of PEP-231 to reflect the deletion of HPP-805 and the addition of HPP-060. (5.4.2.)

37. Completing the printing and distribution of survey forms in the appropriate procedures. (5.4.2)

38. Providing primary orientation and training on Emergency Signals and Procedures. (5.4.2)

39. Providing equipment training and demonstrating personnel accountability. (5.4.3)

40. Completing the security system. (5.4.4)

41. Completing Shearon Harris site specific training for corporate public information personnel. (5.4.7)

42. Completing public education on the Shearon Harris plant. (5.4.4)

43. Completing procedures for inventorying, operationally checking and calibrating emergency equipment, facilities, and supplies. (5.5.1)

44. Completing training for State and county agencies. (6.1)

45. Completing the emergency kits for both hospitals. (6.1)

46. Submitting the final issue of the public information brochure for review of FEMA/NRC. (6.2)

47. Completing placing public notices for transients. (6.2)

48. Initiating the drill and exercise program. (7.1)

49. Completing procedures for dose calculation and protective action decision-making. (7.2.4)