CP&L
Carolina Power & Light Company

P. O. Box 101, New Hill, NC 27562
April 11, 1985

Dr. J. Nelson Grace
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 2900)
Atlanta, Georgia 30323

NRC-351

SHEARON HARRIS NUCLEAR POWER PLANT
UNIT NO. 1
DOCKET NO. 50-400
IE INSPECTION REPORT NO. 50-400/85-04

Dear Dr. Grace:

Carolina Power and Light Company (CP&L) has received Mr. R. D. Walker's letter, dated March 12, 1985, which references the results of the Construction Appraisal Team (CAT) inspection by the NRC in October and November 1984. You requested that CP&L respond to three specific items identified during the CAT Inspection Report No. 50-400/84-41 Appendix A, Executive Summary, Overall Conclusions, Page A-1.

We consider the CAT inspection to have been a beneficial experience for the project. The thoroughness and professionalism demonstrated by the team members was noteworthy. The findings and observations noted in the conclusion paragraphs of the several sections of the report are being given management attention as we continue our internal evaluations of program improvement. In addition to the response requested by Mr. Walker's letter, we would like to take notice of several strengths reported by the NRC appraisal.

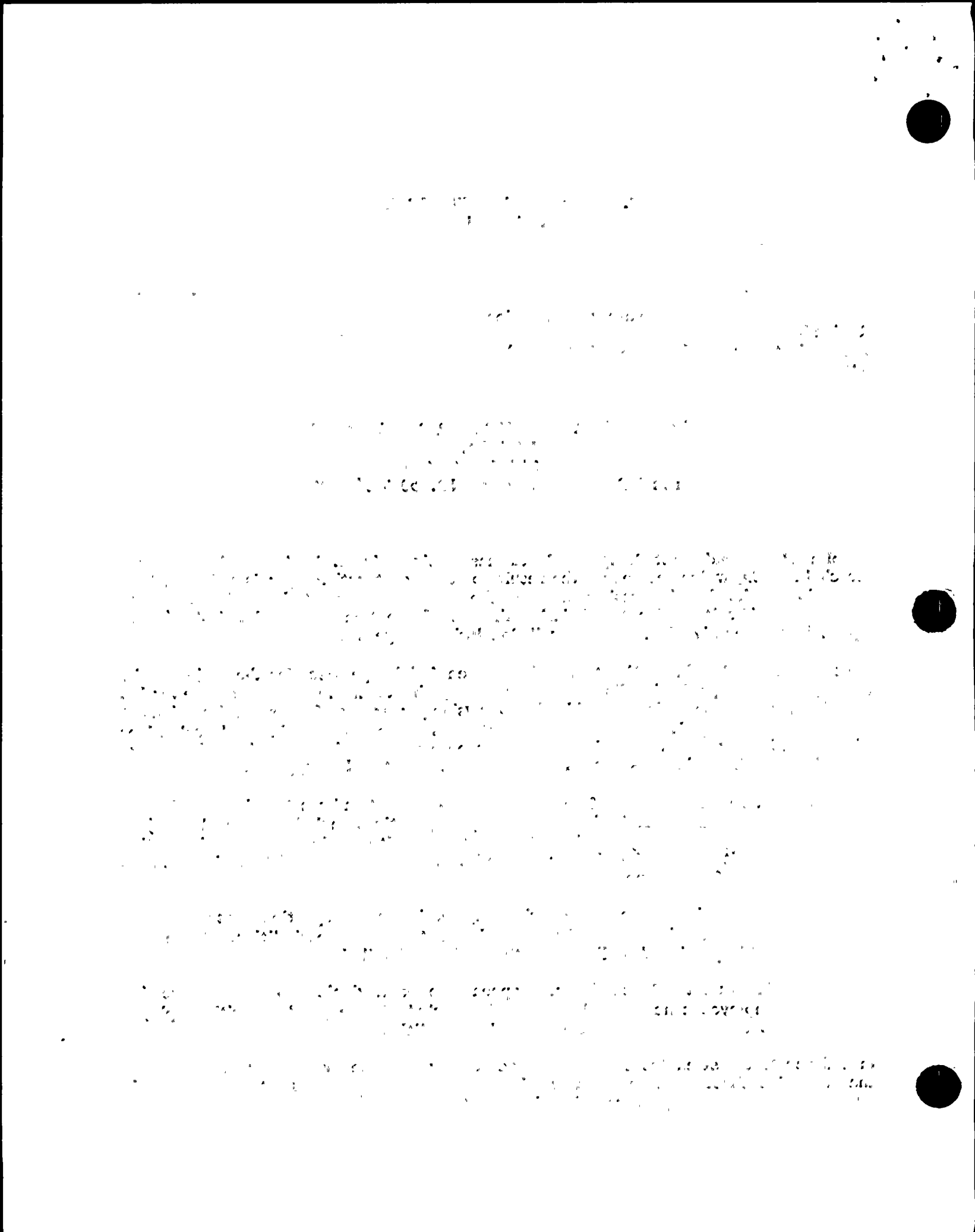
1. There was evidence of good project management and construction practices at the Shearon Harris Site. These good practices include a capable project management organization, the fact that site engineering and inspection activities are primarily located and controlled on-site, and there is extensive use of field engineers.

2. In the pipe support area, site engineering and inspection personnel were knowledgeable of procedures, requirements, and responsibilities. Procedures and inspection checklists were thorough and detailed.

3. The Quality Check Program appears to be a viable method of addressing employee concerns which may help preclude future problems with employee concerns experienced at other nuclear facilities.

In addition to the strengths noted above, we acknowledge the three program weaknesses that were identified. We herewith submit (Attachment) our responses to those items in accordance with your request contained in Report No. 50-400/85-04.

XEX-se14/1-OS5



We consider the management actions being taken are satisfactory for the resolution of the items.

Thank you for the consideration in this matter.

Yours very truly,

R. M. Parsons
Project General Manager
Completion Assurance
Shearon Harris Nuclear Power Plant

RMP:bs

Attachment

cc: Messrs. G. Maxwell/R. Prevatte (NRC-SHNPP)
Mr. B. C. Buckley (NRC)

ATTACHMENT TO CP&L LETTER OF RESPONSE TO NRC REPORT NO. 50-400/85-04

The following is a summary of management actions taken as a result of the three construction program items reported as requiring management attention by the "CAT" Inspection Report 50-400/84-41 Appendix A, Executive Summary, Overall Conclusions, page A-1 issued on December 24, 1984.

ITEM NO. 1: Conflicts were identified between design inputs and FSAR commitments with regard to electrical cable and raceway separation which resulted in separation deficiencies. (The response for this item is provided in two parts: (A) cable, and (B) raceway.)

RESPONSE A (Cable): FCR-E-3693 was issued December 17, 1984, which provided design details for the installation and inspection of exposed cables to exposed cables.

The Harris Plant Engineering Section (HPES) has initiated an evaluation of separation requirements for equipment to equipment, equipment to raceway, equipment to exposed cable, and exposed cable to raceway.

After the design details for exposed cable to equipment are issued, Construction Inspection-Electrical will inspect safety-related equipment for exposed cable separation violations.

Exposed cable separation violations at tray to tray, or tray to conduit entrances and exits will be inspected as a portion of the inspection of the safety-related raceways.

After the above items are completed, the inspection results can be evaluated, and a projected completion date of the rework and final inspection can be established.

At the same time or prior to the initiation of the separation reinspection of safety-related exposed cable and safety-related raceway, new installations of scheduled non-nuclear safety cable will be inspected for separation.

RESPONSE B (Raceway): HPES has prepared an analysis of non-nuclear safety conduit to safety-related tray without covers which justifies the validity of the 1" separation criteria.

HPES is revising the FSAR commitments to reflect the results of the analysis.

HPES is currently clarifying separation requirements for raceway to equipment.

After the design information is issued for separation requirements between raceway and equipment, Construction Inspection will issue a procedure or revise existing procedures to incorporate new design information and reinspect appropriate inspection points for safety-related raceway separation requirements.

At the same time or prior to the initiation of the reinspection of safety-related raceway separation, new installations of scheduled non-nuclear safety raceway will be inspected for separation.

ITEM NO. 2: Hardware discrepancies were found in non-seismic items installed over Seismic Category I items. Failure of these discrepant non-seismic items could adversely affect Class 1E electrical components.

RESPONSE: The Regulatory Guide 1.29 Verification Walkdown commenced on February 26, 1985, utilizing a formal CP&L Engineering Procedure 7.6.B. Since Regulatory Guide 1.29 is followed in the design of the Shearon Harris NPP, this walkdown serves as a confirmation of design controlled components and a verification of field run components. As we stated during the CAT inspection, we had planned to perform this walkdown later in the construction phase of the project. As a result of the CAT identification of this item, we have accelerated the walkdown schedule by initiating a preliminary walkdown to gain an early start on problem identification and resolution. The final walkdown will still occur later in the construction sequence.

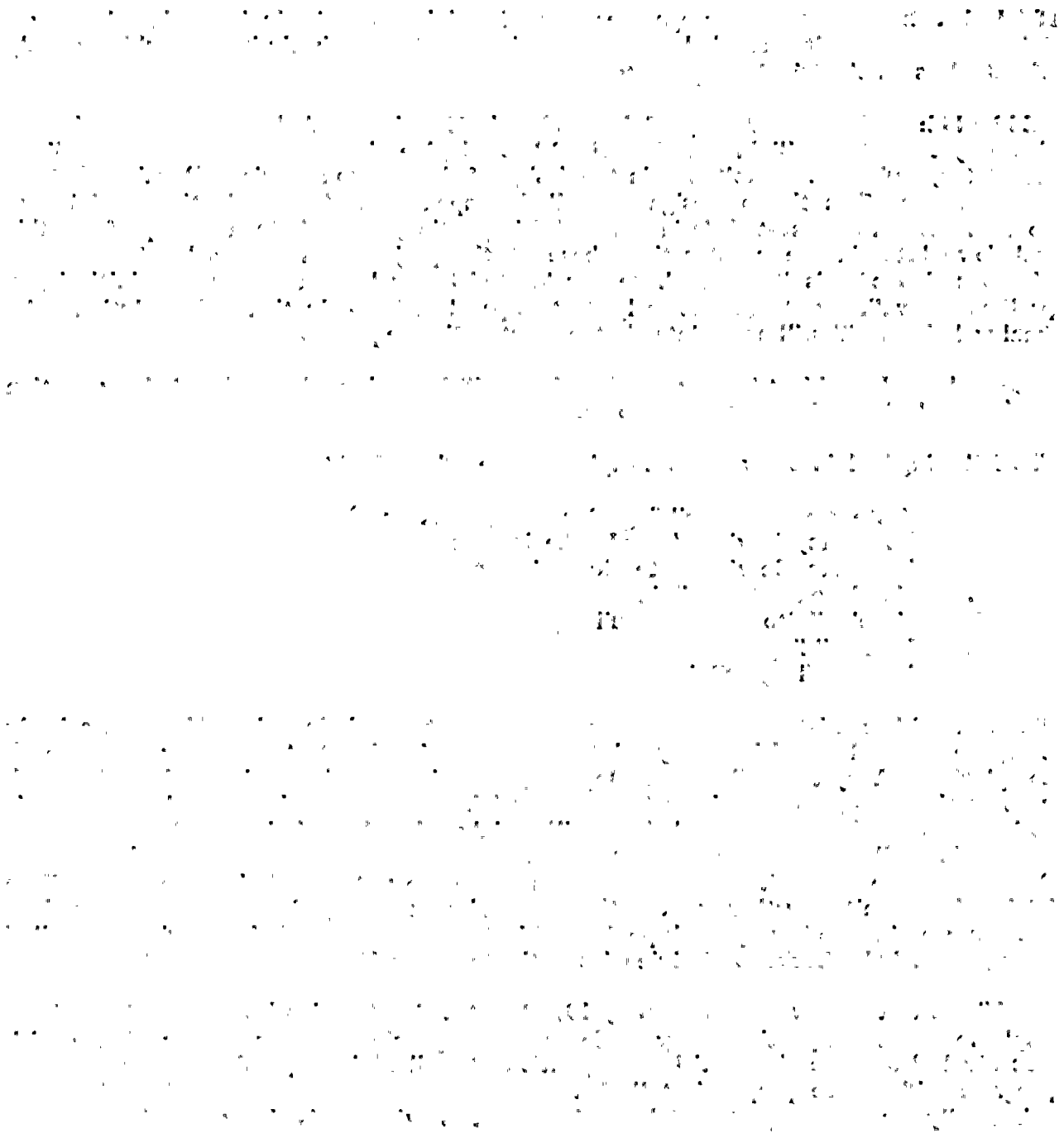
Potential problems identified during this phase will be subjected to a detailed evaluation and/or resolution which may consist of rework .

The following buildings have been completed under Phase 1 of the program:

1. Waste Processing Building (Gas Decay Tank Area)
2. Emergency Service Water Intake Structure
3. Emergency Service Water Screening Structure
4. Diesel Generator Building
5. Diesel Oil Storage Tank Building
6. Tank Building
7. Fuel Handling Building

Phase 2 will consist of a second walkdown of the buildings in which non-seismic components are located in safety-related areas. This will start as the areas approach completion. A system will be developed by Planning and Scheduling which will track construction progress and identify areas which are approaching completion. It is estimated that the Phase 2 Walkdown will mainly take place during the last quarter of 1985. This will ensure an area check for components added between the Phase 1 and Phase 2 Walkdowns. After an area has been walked down the final time, controls will be initiated to monitor further work in the area and ensure Reg. Guide 1.29 considerations are factored into follow-up work performed in the area. The walkdowns will be detailed enough to include checks for deficiencies of the type noted by the CAT inspectors.

In addition to the above, as of January 10, 1985, the Construction Inspection (CI) Unit has implemented an inspection program for non-Q expansion anchors in accordance with Technical Procedure TP-39 titled "Inspection of Drilled in Expansion Anchors". This program will ensure proper installation of future non-Q expansion anchors for non-seismically designed supports which are designed to survive a seismic event (SSE).



ITEM NO. 3: Deficiencies identified in the area of interdisciplinary and pipe to pipe clearances indicated that the identification and resolution of these interferences were not being effectively addressed.

RESPONSE: The Interdisciplinary Clearance Verification Walkdown began on February 26, 1985, governed by a formal CP&L Engineering Procedure 7.6.C. Because various structures, systems and components have been designed with consideration for minimum clearance requirements, this walkdown is a verification of these requirements and to evaluate any violations of this criteria due to physical constraints during the installation of these components. This program is divided into two phases. Phase 1 began February 26, 1985, and is performed concurrently with the Regulatory Guide 1.29 Verification Walkdown. Phase 1 is a walkdown of the buildings in which safety-related components are located. The intent of Phase 1 is to identify as soon as possible any modifications or reroutings that may be required to ensure no detrimental interaction with the existing components prior to system turnover. The following buildings have been completed under Phase 1 of the program:

1. Waste Processing Building (Gas Decay Tank Area)
2. Emergency Service Water Intake Structure
3. Emergency Service Water Screening Structure
4. Diesel Generator Building
5. Diesel Oil Storage Tank Building
6. Tank Building
7. Fuel Handling Building

HPES is developing a site unique comprehensive clearance matrix. This matrix will be utilized by Construction Inspection (CI) and incorporated in the respective inspection Technical Procedures (TPs).

Phase 2 of this program will consist of a second complete walkdown of the buildings which contain safety-related components. This will begin as areas approach completion.

A system will be developed by Planning and Scheduling which will track construction progress and identify areas which are approaching completion.