CP&L
Carolina Power & Light Company

December 5, 1977

Central File
50-261

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Mr. James P. O'Reilly, Director
U.S. Nuclear Regulatory Commission
Region II, Suite 1217
230 Peachtree Street, N.W.
Atlanta, Georgia 30303

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
RESPONSE TO IE BULLETIN 77-06

Dear Mr. O'Reilly:

As requested by IE Bulletin 77-06, oral responses to each of the questions were provided by November 25, 1977. This letter provides written documentation of those responses. The questions and the CP&L responses are provided below.

1.0 Do you have containment electrical penetrations that were of the GE Series 100 or otherwise similar in that they depend upon an epoxy sealant and a dry nitrogen pressure environment to ensure that their electrical and pressure characteristics are maintained so as to ensure the functional capability as required by the plant's safety analysis report; namely (1) to ensure accurate functioning of electrical safety-related equipment and (2) to ensure containment leak tightness?

The Robinson penetrations are not similar to the GE Series 100 type. They are a Westinghouse design manufactured by Crouse Hinds. They use a ceramic sealant and are continuously pressurized to 42 psig with air as a leak detection mechanism not as insulation protection.

1.1 Have you experienced any electrical failures with this type penetration?

No operational failures of these penetrations have been experienced at the Robinson Plant.

2.0 For those penetrations referenced in Item 1 above, have you maintained the manufacturer's prescribed nitrogen pressure at all times?

Not applicable to the Robinson Plant.

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2.1 If you have operated the penetrations without maintaining a nitrogen pressure, was any degradation of insulation resistance or anomalous component operation detected?

Not applicable to the Robinson Plant.

2.2 If no measurements were taken during periods when nitrogen pressure was not maintained however were you assured that the insulation resistance was not degrading or degraded?

Not applicable to the Robinson Plant.

2.3 How do you determine that circuit insulation resistant values are satisfactorily maintained?

The only wires that are checked are for the control rod drive mechanisms which are checked at each refueling. Other cables are verified by normal component operability.

3.0 Is there a need as determined by either the vendor or yourself to maintain penetrations pressurized during a LOCA?

No such need has been identified for the Robinson penetrations. The pressure currently used is solely for leakage determination.

3.1 What measures have you taken to ensure penetration of this type will perform these design functions under LOCA conditions (design review, analysis, test)?

Review of the design and its suitability for its intended function have been performed. In addition, the electrical penetrations have been tested by the vendor under simulated LOCA conditions. This information is available at the plant site for your review.

3.2 Are the measures that provide this assurance adequate to satisfy the Commission Regulations (GDC 4 - Appendix "A" Part 50 - QA Criteria Appendix "B" Part 50)?

The design review process satisfied the appropriate Commission Regulations.

Yours very truly,

E. E. Utley
Senior Vice President
Power Supply

CSB:tme

cc: Mr. E. Volgenau