



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

February 6, 1987

Docket Nos.: 50-321 and
50-366

Mr. J. T. Beckham, Jr.
Vice President - Nuclear Generation
Georgia Power Company
Post Office Box 4545
Atlanta, Georgia 30302

Gentlemen:

SUBJECT: EQUIPMENT QUALIFICATION INSPECTION - PLANT E. I. HATCH,
UNITS 1 & 2 - NOS. 50-321/86-35 and 50-366/86-35

Enclosed is the report of the team inspection conducted by Mr. R. C. Wilson and other NRC representatives on November 3 to 7, 1986, at Plant E. I. Hatch. The team's findings were discussed with you and your staff at the conclusion of the inspection. The inspection reviewed your implementation of a program as required by 10 CFR 50.49 for establishing and maintaining the qualification of electric equipment within the scope of 10 CFR 50.49. Within these areas, the inspection consisted of examinations of selected procedures and records, interviews with personnel, and observations by the inspectors.

The inspection determined that you have implemented a program to meet the requirements of 10 CFR 50.49. Five deficiencies in your program implementation, summarized in Appendix A, are classified as Potential Enforcement/Unresolved Items and will be referred to the NRC Region II office for further action. One of the deficiencies involves operation of Plant Hatch Unit 2 for at least seven months after November 30, 1985 with Limitorque valve operators whose qualification was not demonstrated because they contained unidentified and unqualified internal wiring. Three other significant deficiencies involved failure to demonstrate that plant performance requirements were satisfied for Okonite cable and splices, States Co. terminal blocks, and Rosemount transmitters; these deficiencies reflected failure to consider the impact of cable, splice, and terminal block errors on the instrument loops in which they are used. The fifth Potential Enforcement/Unresolved Item concerns failure to address the qualified life of Target Rock solenoid valves, based on the incorrect premise that EQ-related failures would always place the valve in the same state and condition as electrical de-energization. Two other concerns are classified as Open Items; your actions concerning them will be reviewed in a future NRC inspection. One of the Open Items is noteworthy because it addresses an unusually large number of equipment installation deficiencies observed during the plant walkdown inspection. Details of all the deficiencies and concerns are discussed in the enclosed inspection report.

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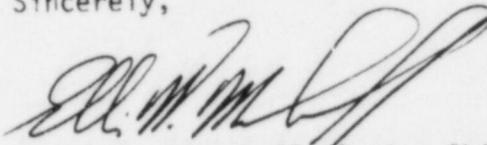
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Completion of your corrective actions regarding the identified deficiencies and concerns should not be delayed pending either a future NRC inspection or further action by the NRC Region II office.

We are available to further discuss any questions you have concerning this inspection.

Sincerely,



Ellis W. Merschoff, Acting Chief
Vendor Program Branch
Division of Quality Assurance, Vendor
and Technical Training Center Programs
Office of Inspection and Enforcement

Enclosures:

1. Appendix A-Potential Enforcement/Unresolved Items
2. Inspection Report No. 50-321/86-35 & 50-366/86-35

cc w/enclosures:

Mr. H. C. Nix, Jr., General Manager
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*by telephone
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APPENDIX A

Potential Enforcement/Unresolved Items

As a result of the special equipment qualification inspection on November 3 to 7, 1986, the following items have been referred to NRC Region II as Potential Enforcement/Unresolved Items (section references are to detailed portions of the inspection report).

1. Contrary to paragraphs (f) and (k) of 10 CFR 50.49 and section 5.2.2 of the DOR Guidelines, during the period from November 30, 1985 until at least July 24, 1986 the Georgia Power Company (GPC) files did not adequately document qualification of Limitorque valve operators in Plant Hatch Unit 2 because the plant equipment was not identical in design and material construction to the qualification test specimen, and deviations were not adequately evaluated as part of the qualification documentation; furthermore, Justifications for Continued Operation were not in place. Specifically, wiring internal to the components was unidentified and/or unqualified. (Section 4.F(1), Item 50-366/86-35-01.)
2. Contrary to paragraph (j) of 10 CFR 50.49, at the time of the inspection the GPC files did not adequately document qualification of Okonite cable and splices because the ability to meet specified performance requirements during accident conditions was not shown. Specifically, performance data taken during the LOCA test, definition of plant electrical performance requirements, and a comparison of the two were not included. (Section 4.F(2), Item 50-321/86-35-01; 50-366/86-35-02.)
3. Contrary to paragraphs (f) and (k) of 10 CFR 50.49 and section 5.2.5 of the DOR Guidelines, at the time of the inspection the GPC files did not adequately document qualification of States Co. terminal blocks because the ability to meet specified performance requirements during accident conditions was not shown. Specifically, definition of plant electrical performance requirements and comparison of test data with them were not included. (Section 4.F(3), Item 50-321/86-35-02; 50-366/86-35-03.)
4. Contrary to paragraphs (f) and (k) of 10 CFR 50.49 and section 5.2.5 of the DOR Guidelines at the time of the inspection the GPC files did not adequately document qualification of Rosemount transmitters because the ability to meet specified accuracy requirements during accident conditions was not shown. Specifically, transmitter accuracy calculations and comparisons with plant requirements did not include errors from other equipment such as terminal blocks located in harsh environments. (Section 4.F(4), Item 50-321/86-35-03; 50-366/86-35-04.)
5. Contrary to paragraph (j) of 10 CFR 50.49, at the time of the inspection the GPC files did not adequately document qualification of Target Rock solenoid valves because the qualified life of the equipment was not determined. Specifically, the claim that the valves would "fail safe"

was not supported because the files did not contain sufficient design information to support a failure analysis or to show similarity between installed and tested equipment; furthermore, the qualified life could also not be determined from information in the files because the quoted 120F normal ambient temperature did not include allowance for heat generated by solenoid coil operation or for heat transferred from the process fluid. (Section 4.F(5), Item 50-321/86-35-04; 50-366/86-35-05.)